

# Below the Golden Rock

The Social Practice of Diving at St. Eustatius



WAGENINGEN **UR**

*For quality of life*

Source picture: Scubaqua & Dive Statia ©

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*“I fell in love with this island like you fall  
in love with a woman sometimes”*

(Heinz)

*“Statia is the most beautiful island of  
the world”*

(Elizabeth)

Three years ago was the first time I had to write a thesis, which was in order to finish my Bachelor's degree. Following its completion, I promised myself that I would never write a thesis again. But here I am, three years later writing my Master's thesis. Luckily, this experience was completely different from my previous one. I am thankful that I decided to continue my education with a Master's degree, since the MLE course was a great experience. Two years ago, I would have never expected that continuing my education would give me so much satisfaction. The MLE course challenged me in many different, but positive ways. The most important thing that I have learned is to be more critical, to reflect on the things I read and hear, and to formulate my own opinions. This is something that I will strive to do for the rest of my life.

This thesis would not have been possible without the help, encouragement, and love of so many people. First of all, I would like to thank my supervisor, Rene van der Duim, for giving me great guidance. Even though the feedback made it difficult at times, it always helped me to look critically at my own work. His approach was very motivating for me, and I am very thankful for his advice, knowledge and enthusiasm. I also would like to thank Rene Henkens for helping me look at the thesis from the perspective of St. Eustatius. I very much enjoyed working closely together with René van der Duim and Rene Henkens as this challenged me to look at my thesis from different points of view, thank you!

Without the help of the different stakeholders at St. Eustatius, this thesis would not have been possible. Therefore, I would like to thank Charles Lindo from the St. Eustatius Tourism Development Foundation, who helped me to get in contact with many stakeholders and who shared his knowledge with me. A special thanks to Dive Statia & Scubaqua, and Golden Rock Dive Centre for allowing me to conduct my fieldwork at their dive centers. Without your help, it would have been impossible! I also want to thank the complete crew of Dive Statia & Scubaqua (Mike, Marieke, Ingrid, Menno, Vincent, Bianet, Prisca & Noortje) for helping me with my research and for the great time on Statia. I conducted the questionnaires together with Mischa Streekstra, so I would also like to thank her for working together with me and for the nice time we had on the island!

I would like to express gratitude for my family and friends, including the great MLE friends! The many coffee breaks and dinners with my MLE friends made the thesis process so much more fun. My friends and family were of great support and provided a very pleasant distraction when I needed a break. Finally, I would like to thank my dad because, without him, I would not have achieved my goals.

Dive tourism is one of the fastest growing sectors in the tourism industry. Particularly for tropical destinations, diving tourism is of great economic importance. Diving tourism is also the main tourism activity on the Caribbean island St. Eustatius. However, tourism on the island needs further development in order to be an important economic pillar. As a result, the island authorities are developing a sustainable tourism master plan. This thesis contributed to this master plan by providing an analysis of the social practice of diving at St. Eustatius. This study created a better understanding of this important niche market on the island.

In order to create a better understanding of diving, this study used social practice theory. A practice is a routinized type of behaviour and consists of three elements: material, meaning, and competences. Studying diving with the use of social practice showed that diving is more than only enjoying the beautiful underwater world. Diving is about the experience of being in 'another world'. The practice of diving enables divers to escape from their everyday life and enter a place where there is no pressure or stress from the outside world. Divers are able to escape to this 'other world' due to increased competences, safe and familiar equipment, and the support of the producers of diving. A high level of competence implies familiarity with the skills and the surroundings, which reinforces the feeling of being in 'another world'. The dive equipment is also important: a feeling of safety and trust in the equipment helps the diver to relax and enter 'another world'. The producers of diving are the stakeholders at St. Eustatius who can influence the practice of diving. For example, the dive centers have a positive influence on the practice of diving since they strive to reduce the amount of stress for the divers. Together with the 'old Caribbean' atmosphere at the island, this enables the feeling of being in 'another world'.

In addition to the social practice theory, this research used participant observation and questionnaires to create a socio-economic profile of the divers at St. Eustatius. Most divers on St. Eustatius are from the Netherlands, United States or France, and are between 45 and 54 years old. Their level of education is high; almost all divers have a Bachelor's or Master's degree. The divers that visit the island are highly experienced, as most of them have dived for at least 10 years. On average, the divers stay for nine days on St. Eustatius, and dive approximately 11 times. Although diving is obviously the key activity for a majority of divers, 77% of the divers were also involved in other activities, such as hiking and visiting the historical monuments. The divers spent approximately between \$2.000 and \$2.300 per week for their stay on St. Eustatius. This is without the international flight to St. Martin.

For St. Eustatius, diving tourism is the most important tourism product. While the divers love diving and the diving facilities on the island, they also felt there were some improvements to be made. Based on the interviews and questionnaires it is recommended to:

- **Invest in small-scale lodges**

More accommodation facilities are necessary to develop tourism, but the kind of accommodation should correspond to the needs of the tourists.

- **Create better flight connections**

Without a better infrastructure it will not be possible to develop tourism.

- **Increase tourist facilities and activities**

More shops, restaurants, bars, and touristic activities are required in order to meet the needs of the tourists.

- **Train hospitality workers**

Training is mandatory to keep up with the competition of other Caribbean islands, and to make the service up to standard compared to the (relatively high) prices.

- **Reduce the waste**

It is necessary to find a solution for the waste problem before the amount of tourists and thus waste begins to increase.

- **Involve locals**

The sustainable development of tourism on St. Eustatius is impossible without the involvement of local residents, which now primarily depends on initiatives from people abroad.

Besides these recommendations, it is important for the island to maintain their unique selling points. The divers are attracted to the island by the tranquillity and the quietness. If St. Eustatius begins attracting new tourism market segments, this should not conflict with dive tourism. At the moment, the island allows divers to escape into 'another world'. This is the essence of diving, and therefore it would be useful to attract the kinds of tourists who are also interested in the same aspects of the island that attract the divers. This would enable new market segments to coexist next to the diving segment, instead of endangering what makes the island so unique to divers.

## CONTENT

1. INTRODUCTION .....	1
1.1 PROBLEM STATEMENT .....	3
1.2 RESEARCH OBJECTIVES .....	4
1.3 RELEVANCE OF THIS STUDY .....	5
1.4 THESIS OUTLINE .....	5
2. ST. EUSTATIUS .....	6
2.1 STAKEHOLDERS TOURISM ST. EUSTATIUS .....	10
2.1.1 ST EUSTATIUS NATIONAL PARKS .....	10
2.1.2 DIVE CENTERS .....	11
2.1.3 ST. EUSTATIUS TOURISM DEVELOPMENT FOUNDATION .....	13
2.1.4 ST. EUSTATIUS HISTORICAL FOUNDATION .....	13
3. THEORETICAL FRAMEWORK .....	14
3.1 DIVING TOURISM .....	15
3.2 SOCIAL PRACTICE THEORY .....	19
3.2.1 MATERIAL .....	22
3.2.2 COMPETENCE .....	23
3.2.3 MEANING .....	26
3.2.4 PRODUCERS OF THE PRACTICE .....	27
3.3 CASE STUDIES .....	28
4. METHODOLOGY .....	31
4.1 ETHICS .....	32
4.2 STUDY SITE .....	33
4.3 QUALITATIVE RESEARCH .....	33
4.3.1 DATA ANALYSIS .....	35
4.4 QUANTITATIVE RESEARCH .....	35
4.4.1 MEASUREMENT PROCESS .....	38
4.4.2 DATA ANALYSIS .....	38
4.5 RESEARCH LIMITATIONS .....	38
5. QUALITATIVE RESULTS .....	41
5.1 THE ESSENCE OF DIVING .....	42

5.2 MEANING .....	43
5.2.1 LOVE FOR THE SEA AND MARINE LIFE .....	44
5.2.2 ANOTHER WORLD .....	44
5.2.3 EMOTIONS RELATED TO BEING IN ANOTHER WORLD .....	45
5.2.4 ROLE OF DIVING IN EVERYDAY LIFE .....	46
5.2.5 DO IT TOGETHER .....	47
5.2.6 TO CONCLUDE: MEANING .....	47
5.3 COMPETENCE .....	48
5.3.1 LEVEL OF SKILL .....	48
5.3.2 DIVE EXPERIENCE .....	49
5.3.3 TO CONCLUDE: COMPETENCE .....	50
5.4 MATERIAL .....	51
5.4.1 OWN EQUIPMENT VERSUS RENTED EQUIPMENT .....	51
5.4.2 UNDERWATER PHOTOGRAPHING .....	52
5.4.3 LOGBOOK.....	53
5.4.4 DIVE ENVIRONMENT.....	53
5.4.5 TO CONCLUDE: MATERIAL.....	54
5.5 PRODUCERS OF THE PRACTICE .....	55
5.5.1 STENAPA AND DIVE CENTERS .....	55
5.5.2 ST. EUSTATIUS TOURISM DEVELOPMENT FOUNDATION .....	56
6. QUANTITATIVE RESULTS .....	60
6.1 DEMOGRAPHIC DATA.....	61
6.2 ST. EUSTATIUS .....	64
6.2.1 AVERAGE STAY .....	67
6.2.2 INVOLVEMENT IN ACTIVITIES .....	68
6.2.3 AVERAGE SPENDING .....	70
6.3 DIVING ST. EUSTATIUS .....	72
6.4 DIVING.....	74
7. DISCUSSION & CONCLUSION.....	78
7.1 CONCLUSION .....	79
7.2 REFLECTION ON THEORY AND METHODS .....	80
7.3 TOURISM POLICY ST. EUSTATIUS.....	81
7.3.1 RELIABILITY EXISTENT DATA .....	81
7.3.2 NEW MARKET SEGMENTS .....	82



7.4 RECOMMENDATIONS FOR TOURISM DEVELOPMENT IN ST. EUSTATIUS .....	83
7.5 RECOMMENDATIONS FOR FURTHER RESEARCH.....	86
REFERENCES.....	87
APPENDIX I – STATIA NATIONAL MARINE PARK DIVE MAP .....	93
APPENDIX II – PADI COURSE .....	94
APPENDIX III – SUMMARY FIGURE 4 .....	95
APPENDIX IV – OVERVIEW DIVE TYPOLOGIES.....	96
APPENDIX V – INTERVIEW SCHEDULE ENGLISH .....	97
APPENDIX VII – INTERVIEW SCHEDULE DUTCH .....	100
APPENDIX VII – QUESTIONNAIRE ENGLISH .....	103
APPENDIX VIII – QUESTIONNAIRE FRENCH .....	111
APPENDIX IX – QUESTIONNAIRE DUTCH .....	120
APPENDIX X – APPENDIX QUESTIONNAIRES .....	128
APPENDIX XI – QUANTITATIVE ANALYSIS .....	130

### Abbreviations

CBS – Centraal Bureau voor de Statistiek (Central Agency for Statistics)

DEMA – Diving Equipment & Marketing Association

PADI – Professional Association of Diving Instructors

SECAR – St. Eustatius Center for Archaeological Research

STENAPA – St. Eustatius National Parks

WINAIR – Windward Island Airways

WTO – World Tourism Organization

### Tables

Table 1: Number of divers Scubaqua & Dive Statia

Table 2: Number of dives Scubaqua & Dive Statia

Table 3: Cross tabulation First visit to Statia \* Visits other Caribbean islands

Table 4: Cross tabulation First visit to Statia \* Involved in other activities

Table 5: Average rate of accommodation cost per night

Table 6: Involvement in different types of Scuba diving

Table 7: Dive destinations visited before

### Figures

Figure 1: Location of St. Eustatius

Figure 2: Submarket segments

Figure 3: Possible continuums of diving tourists

Figure 4: Overview of types of diving

Figure 5: Proto-practices, practices and ex-practices

Figure 6: Educational structure of the dive industry

Figure 7: Age category of the participants

Figure 8: Nationalities of the participants

Figure 9: Level of education of the participants

Figure 10: Household income per year before taxes of the participants

Figure 11: Number of returns to St. Eustatius

Figure 12: Bar chart cross tabulation First visit to Statia \* Visits other Caribbean islands

Figure 13: Involvement in activities besides diving

Figure 14: Bar chart cross tabulation First visit to Statia \* Involved in other activities

Figure 15: Average daily spending

Figure 16: Average expenses per diver per week according Scubaqua & Dive Statia

Figure 17: Dive sites St. Eustatius

Figure 18: Dives site use per year

# 1. Introduction



Scubaqua & Dive Statia ©

Scuba diving started to be included in the promotion of tropical tourist destinations around the 1960s (Santander-Botello & Propin-Frejomil, 2009). Since then, diving has gained popularity, and nowadays, almost one and half million people obtain diving certifications every year (Santander-Botello & Propin-Frejomil, 2009). Of all the certified divers in 2007, 7.3 million were active divers and around 2.7 million divers made a minimum of one trip a year with the main purpose of diving (Acorn Consulting Partnership LTD, 2008). Studies showed that diving tourist are usually individuals from developed countries travelling to tropical destinations (Santander-Botello & Propin-Frejomil, 2009)

The Caribbean is a popular tropical destination, and for many Caribbean islands the magnificent underwater world is an important tourism attraction. The Caribbean attracts 57% of the scuba divers in the world, and every year diving tourism generates \$200 million in this area (Cesar, Burke, & Pet-Soede, 2003). Almost all the Caribbean islands offer the possibility to dive, although the quality of the diving product differs regarding the facilities on the islands. Some islands have large hotels chains and resorts with many facilities and other islands are more quiet and untouched.

St. Eustatius is one of those relatively untouched islands and is represented as the 'old Caribbean' (St. Eustatius Tourism Development Foundation, n.d.). Compared to many other Caribbean islands, St. Eustatius is less crowded and less developed. The island has great diving conditions and multiple outstanding dive sites, which are only visited by a few dozen divers. The island's government has the ambition to further develop tourism in the future, but it wants to do this sustainably. This way they want to secure the island from any harm. Since the underwater world is considered one of the island's main tourism attractions, it is helpful to understand diving and what it means for the divers. In order to further develop tourism in St. Eustatius, it is necessary to gain a greater understanding of diving. This will be useful for supporting sustainable tourism in the future, enabling visitor management, and improving marketing. For an island with unique characteristics, such as St. Eustatius, it is necessary to examine this specific case only in order to understand diving. The unique features, such as the lack of mass tourism, a protected marine park, and regulations for the dive centers, makes the island nothing like the other Caribbean islands. However, in order to enjoy the magnificent underwater world and the island, the divers have to invest a lot of time, money, and effort in order to visit St. Eustatius. To know why dozens of divers make the effort to visit the island, it is necessary to understand the meaning that is attached to diving at the island. In addition, it is useful to know some of the characteristics of the divers that visit the island.

## 1.1 PROBLEM STATEMENT

St. Eustatius sees tourism as a promising economic pillar (Hoogenboezem-Lanslots et al., 2010), and in order to develop sustainable tourism on the island, knowledge of the current situation of tourism is necessary. To gather this knowledge, St. Eustatius works together with the University of Wageningen to create a master plan for sustainable tourism at the island. Different studies contribute to this final master plan (Streekstra, 2015); this research is focused on diving since the tourism at the island mainly consists of diving tourism (Hoogenboezem-Lanslots et al., 2010). Despite the fact that diving is the most important tourism product of the island, there is not much information available about this topic. Fortunately, some other studies were conducted about diving, although for different purposes. Nevertheless, these studies still help to gain a better overall understanding of diving.

Since the sport started to become more popular, more parties wanted to know who these people were that started diving. *Skin Diver* magazine started collecting data in the 1980s about American divers and their interests. These results showed that during this time frame diving was a male-dominated sport, and the divers were well-educated, financially secure, and in their 30s (Tabata, 1992). Currently, the world's largest scuba diving training organization, the Professional Association of Diving Instructors (PADI), is an important resource for data about divers. PADI, for example, collected data regarding the percentages of men and women diving (65,5% male versus 34,5% female in 2013), and it also looked at the average age (29 years old) of people who obtained PADI diving certificates (PADI, 2014). Also, the Diving Equipment and Marketing Association (DEMA) published several research reports (DEMA, 2014) that contained information about the different kinds of divers (e.g., insight into open water divers and live aboard divers). However, this data was mainly focused on American divers. Additionally, it explained a profile of the (American) diver, but it did not create an understanding of diving itself, especially not an understanding of diving at St. Eustatius. A sole profile of a diver does not explain why only a few divers decide to go diving at St. Eustatius nor why 40% to 60% of the divers keep returning to the island once they have discovered it (I. Walther, personal communication, 1 December, 2014; G. Faires, personal communication, 3 December, 2014). In order to contribute to the tourism master plan for the island, this research will create a better understanding of this important tourism niche on St. Eustatius.

## 1.2 RESEARCH OBJECTIVES

To gain a better understanding of diving at St. Eustatius, social practice theory will be used. This theory assists in gaining an understanding of how diving shapes and is shaped by the context in which it is used (Shove, Pantzar & Watson, 2012). For the island, it is useful to have a greater understanding since this can be important input for further plans in the development of sustainable tourism on the island. When studying diving as a social practice, material, meaning, and competence play central roles. Studying diving from different perspectives helps to gain understanding of diving. In order to have a greater understanding of diving, it is necessary to investigate the divers at St. Eustatius since these individuals are the ones who can help to gain insight into the practice. By investigating the experiences, interests, and motives of divers, it will be possible to understand diving. When St. Eustatius is able to understand the practice of diving, they can use this as input for the further development of sustainable tourism on the island. Additionally, the understanding of the practice of diving can give input for targeting new divers, which is useful from a marketing perspective.

However, it is important to keep in mind that this research cannot be generalized for diving as a practice over the whole Caribbean, or other, dive destinations. This research is only focused on understanding diving at St. Eustatius. Due to the unique characteristics of diving at the island, it cannot be assumed that diving has the same meaning at other dive destinations. The research objectives are to explore and determine an understanding of diving at St. Eustatius. In order to explore this, first the following central research question was formulated: *What is the social practice of diving at St. Eustatius?*

In addition to understanding diving as a social practice at St. Eustatius, it is useful to know who the divers are that visit St. Eustatius. This will be investigated by creating a socio-economic profile of the divers that visit the island. Compared to the deeper understanding of diving, the socio-economic profile will be more practical by giving information about the average length of stay, dive characteristics, and demographic data of the divers. In order to obtain a better understanding of the divers that visit St. Eustatius, the following second question was formulated: *What is the socio-economic profile of the scuba divers that visit the island St. Eustatius?*



### 1.3 RELEVANCE OF THIS STUDY

The World Tourism Organization (WTO) stated in 2001 that *“scuba diving is one of the fastest growing sectors of the tourism trade”* (p. 38). The sector is of great economic importance, especially for tropical destinations. However, there has not been much scientific research conducted in this field. The scientific research that has been conducted was mostly focused on environmental issues. This research will contribute to the use of the practice turn in tourism studies. Moreover, this thesis will contribute to a better understanding of this form of special interest tourism. In addition, this research will contribute to the master plan of sustainable tourism on St. Eustatius. Currently, tourism on the island is mainly focused on diving tourism, and therefore, it is necessary to gain a better understanding of diving. The outcome of this research can be used as input for the sustainable tourism master plan, for visitor management, and for marketing strategies for the island. In addition to the practical relevance for St. Eustatius, this research is also scientifically relevant since it contributes to the practice turn by creating an understanding of diving.

### 1.4 THESIS OUTLINE

This thesis consists of seven chapters. This first chapter was an introduction of the topic of this thesis, including the research questions. Since this research was conducted on St. Eustatius, it is necessary to gain a better understanding of the island and the stakeholders involved. Therefore, Chapter 2 will be solely focused on St. Eustatius in order to understand the context of this study. Chapter 3 will cover the theoretical framework used for this study. This chapter will start with a literature review on diving tourism, followed by a discussion of the meaning and the implementation of the social practice theory. Chapter 4 will give an account of the methodology used. It will provide an overview of the research design, ethics, the study site, methods of data collection and analysis, and the research limitations. Chapter 5 will present the results of the qualitative research. The chapter will start with the essence of the practice of diving and continues with a comprehensive description of the findings from the qualitative research, according to different themes from social practice theory. Chapter 6 will describe the results of the qualitative research. The chapter will start with the demographic data of the divers, followed by statistical data concerning St. Eustatius, diving at St. Eustatius, and diving in general. Finally, Chapter 7 will consist of a conclusion and discussion. The discussion will reflect on the theories used, the tourism policy of St. Eustatius, recommendations for the island, and recommendations for further research.



## 2. St. Eustatius



*Scubaqua & Dive Statia ©*

St. Eustatius is located in the Windward Island region together with the other Dutch islands, Saba and St. Maarten (Figure 1). The locals call the island Statia or sometimes the Golden Rock (Central Bureau of Statistics , 2009). The island has been a special municipality of the Netherlands since 2010, together with Saba and Bonaire. Thus, St. Eustatius is a public body of the Netherlands. This means that the island is under the administration of the Netherlands, but the island has its own government (Nationsonline, Netherlands Antilles, n.d.).



Figure 2. Location of St. Eustatius (St. Eustatius Tourism Development Foundation, n.d.).

The only city in St. Eustatius is Oranjestad, and this is the only town on the island. St. Eustatius has an area of 21 km<sup>2</sup> and had a population of 3500 inhabitants in 2009 (Hoogenboezem-Lanslots et al., 2010). The official language of the Netherlands Antilles is Dutch. However, English is the commonly spoken language (CBS, 2009). St. Eustatius has a tropical monsoon climate with a dry season from January to September and a wet season from October to December. Due to the tropical climate on the island, the average temperature is 27°C (Klimaatinfo, n.d.).

The island has a rich history. The famous explorer Christoffel Columbus discovered it in 1493, which made the island Spanish territory (Wierstra, 2012). In the next centuries, the island became territory of multiple countries, including France, England, and the Netherlands. In the 17<sup>th</sup> century, when St. Eustatius belonged to the Dutch, the island became an important harbour for the West India Company (Wierstra, 2012). This made the island, compared to many other Caribbean islands, not dependent on cotton, indigo, and tobacco, but instead dependent on trade. Due to the trade port on St. Eustatius, the island became important, with a booming economy and a rising population of 20.000 inhabitants at the peak of its success (St. Eustatius Historical Foundation, n.d.). The island still has many archaeological sites descended from the period when the island was the busiest port in the world.

Currently, the economy of the island is mainly dependent on the government, which generates many jobs on the island (Chamber of St. Eustatius & Saba, n.d.). NuStar is the largest private company of St. Eustatius; the company is an oil terminal operator and the terminal at St. Eustatius is one of NuStar's largest. NuStar is also the largest private employer in St. Eustatius; it offers 140 jobs, which is a significant number for the island. Additionally, many other companies on the island are dependent on NuStar (Hoogenboezem-Lanslots et al., 2010). The tourism on the island also contributes to the island's economy. The medical school used to play an important role economically, but due to issues with accreditation, the school had to close.

The island is still at the development stage of tourism, but the government wants to further develop this industry on the island (Chamber of St. Eustatius & Saba, n.d.). The local government wants to develop in a sustainable manner because they acknowledge the unique qualities of the island (Hoogenboezem-Lanslots et al., 2010):

*The island is authentic and pure, has many cultural heritage sites, beautiful natural landscapes, unique flora and fauna and excellent diving sites. Other qualities that attribute to Statia's identity are the local culture, the peacefulness and the small size....Statia's development must be based on these unique identifying qualities: to strengthen and protect them and use their full potential for the island's well being, now and in the future. (p. 7)*

According to the local government, the tourism sector has great economic potential. In order to attract tourists to the island, the government believes that the room capacity needs to increase to 250 to 300 hotel rooms (Hoogenboezem-Lanslots et al., 2010). When the number of tourists increases, the demand for other facilities increases as well, which will create "*extra income and contributes to the stratification of the labour market*" (Hoogenboezem-Lanslots et al., 2010, p. 9). Currently, St. Eustatius is not interested in the larger travel agencies due to limited room capacity. Additionally, the trip for tourist is relatively expensive due to the absence of direct flight connections (Hoogenboezem-Lanslots et al., 2010). The island's market position would be improved when the capacity of rooms increases and when there are direct flight connections available (Hoogenboezem-Lanslots et al., 2010). However, the island is not interested in developing large hotels and resorts. According to the Strategic Development Plan, large hotels and resorts do not suit the island. Therefore, St. Eustatius beliefs it is better to invest in small-scale hotels (Hoogenboezem-Lanslots et al., 2010). St. Eustatius now markets itself as the Caribbean from 25 years ago and large hotels and resorts do not fit this image (St. Eustatius Tourism Development Foundation, n.d.).

Currently, there is only one scheduled carrier offering regular air service between St. Eustatius and St. Maarten. Windward Island Airways (WINAIR) operates five flights per day between the islands;

the flight time is around 20 minutes (St. Eustatius Tourism Development Foundation, n.d.). Every flight has a capacity of 20 passengers. There are no regular flight connections with the other surrounding islands, but there are some companies and private owners that have charter services. There are no regular boat connections between St. Eustatius and the other surrounding islands; however, sometimes there are boat connections, but these are not scheduled.

St. Eustatius's government aims to have a sustainable economy, and tourism can be a part of this solution. Tourism has to contribute to the growth of employment, according to the Strategic Development Plan of the island (Hoogenboezem-Lanslots et al., 2010). St. Eustatius aims to grow from 1015 jobs in 2010 to about 1625 jobs in 2020; this will be accompanied by a growth of inhabitants (Hoogenboezem-Lanslots et al., 2010). According to the Strategic Development Plan, the jobs in the tourism sector are aimed to increase from 125 jobs in 2010 to 300 jobs in 2020 (Hoogenboezem-Lanslots et al., 2010).

There is a problem with estimating the current situation of tourism on St. Eustatius. This is due to the problems with the completeness of the published statistical information about tourism. In 2008, the St. Eustatius Tourism Development Foundation stated that there were 10.762 visitor arrivals and that the island had a capacity of 66 hotel rooms. In 2010, there were a few more hotel rooms, approximately 75 according to the Strategic Development Plan (Hoogenboezem-Lanslots et al., 2010). In 2014, there was a press release from the Centraal Bureau voor de Statistiek (CBS) that indicated that in 2013 there were around 19.000 tourists and approximately 220 beds. According to the CBS, the tourists stayed for an average of nine nights, but it admitted that this number was somewhat influenced by tourists who stayed on the island for a month or longer (CBS, 2014). With 19.000 tourists every year, there should be 52 tourists arriving per day, which means that on average there are 468 tourists on the island every day. This number is quite high compared to the 220 beds available on the island. This can be explained by the definition of tourist that was used by the CBS. The CBS (2014) defined tourists as all the non-residents on the island. Therefore, the number of 'tourists' was high because these were not only 'tourists' that visited the island for leisure purposes. Many of those 'tourists' were business people who visited the island due to the NuStart terminal or for governmental purposes. The St. Eustatius Tourism Development Foundation and the Commissioner of tourism are aware of the problems with the statistical data. They see the current statistical data as a starting point to gain more accurate data in the future (C. Lindo, personal communication, 3 October, 2014; C. Tearr, personal communication, 13 October, 2014).

In order to gain an indication of the number of dive tourist that visit the island, it is useful to look at the data from St. Eustatius National Parks (STENAPA) and one of the dive centers. One of the dive

centers estimated that there were around 1200 dive tourists on the island in 2013 (I. Walther, personal communication, 1 December, 2014). In 2013, approximately 700 divers dived with Scubaqua Dive Statia; these 700 divers made 5700 dives. The only statistical information available from STENAPA is the total number of dives made in 2013. According to STENAPA, a total of 7581 dives were made in 2013. If 700 divers completed 5700 dives, then each diver completed approximately eight dives. This means that 7581 dives result in approximately 948 divers if the calculation of eight dives per diver is correct. When considering Scubaqua & Dive Statia's estimation of 1200 divers in 2013, it is possible to estimate that in 2013 between 1000 and 1200 divers dived on St. Eustatius. Thus, the dive tourism industry on St. Eustatius consisted of 1000 to 1200 divers in 2013. Unfortunately, it is not possible to estimate the number of divers compared to the total number of visitors. This is due to the lack of reliable statistical data about the tourism industry.

## 2.1 STAKEHOLDERS TOURISM ST. EUSTATIUS

For the island, there is an economic opportunity in the field of tourism. In the island's strategic development plan, the main attractions are described as the world class diving possibilities, the heritage, and eco-tourism (Hoogenboezem-Lanslots et al., 2010). Many of these main attractions are linked to stakeholders on the island; therefore, the stakeholders who are important influencers of the overall tourism product will be discussed.

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### 2.1.1 ST EUSTATIUS NATIONAL PARKS

The land and water on St. Eustatius is protected and preserved STENAPA. The non-profit foundation protects three national parks; one of them is the St. Eustatius National Marine Park. The Marine Park covers the entire coastal area, which includes the majority of the diving sites. In Appendix 1, there is a map of the coastal area around St. Eustatius, including the Marine Park and the dive sites. In the protected area, there are two reserves in which fishing and anchoring are prohibited in order to protect the biodiversity of the water, the corals, and the fish species. The coral reefs in the Marine Park are of great value for the island because they can create a sustainable income from coastal tourism (Hoogenboezem-Lanslots et al., 2010). In addition, the coral reefs are a natural hurricane damage barrier for the area. Therefore, it is necessary to sustain the ecosystem underwater in order to further develop the island. STENAPA works together with the dive centers on the island in order to ensure that diving in the Marine Park has minimal impact. When the competences of a diver are not at the right level or the diver is careless, it can leave non-recoverable damage to the coral reef. That is why it is important to create awareness amongst the divers; when divers have this knowledge, it

can help to minimise their impact. When divers possess more knowledge, it is more likely that they will behave in appropriate ways (Garrod & Gössling, 2008). One-way STENAPA and the dive centers try to minimise the impact of the divers is by the use mooring lines. In both reserves of The Marine Park, there are mooring lines, which enable divers to experience the underwater world in St. Eustatius because the mooring line anchors are no longer needed. People are only allowed to enter The Marine Park with one of the local dive centers. Additionally, the divers have to purchase dive tags, which are \$30 for an annual pass or \$6 for a single pass. The money that STENAPA receives from the dive tags is used for the maintenance of the marine park (STENAPA, n.d.). Because diving is only permitted with the dive tags, STENAPA has statistical information about the number of dives each year, the dive tags sold, and the visited dive sites. Unfortunately, the data is not complete. The last information about the total numbers of divers is from 2008. In 2008, there were a total of 2250 divers. This number is broken down into 1315 annual passes and 935 single passes (STENAPA, n.d.). In total, 7480 dives were made that year with the dive centers (STENAPA, n.d.). There is information about the dive site use from 2013. In that year, a total of 7581 dives were made (STENAPA, n.d.). Unfortunately, it is not clear how many dive tags were sold that year.

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#### 2.1.2 DIVE CENTERS

On the island, there are three dive centers active (Dive Statia, Scubaqua, and Golden Rock Dive Center), which are all affiliated with PADI. They offer dives, certifications programs, equipment rentals, and tours for diving and snorkelling. Two of the three dive centers work together: Dive Statia and Scubaqua. They mostly operate under the name Scubaqua. Scubaqua and Dive Statia are owned by four people. Two of them started nine years ago, and the others started around five years ago (M. Harterink, personal communication, 18 October, 2014). In the last couple of years, Scubaqua & Dive Statia actively promoted diving on St. Eustatius through different channels, such as articles in magazines, TV documentaries, and different dive fairs. Additionally, they invested in their company by renovating their dive center in order to meet the needs of their customers. In order to be attractive for the American market, they also invested in a larger boat. All these efforts resulted in a growing number of divers and a growing number of dives. In Table 1, the number of divers that dove with Scubaqua & Dive Statia over the years 2007 to 2013 is displayed. In Table 2, the number of dives sold by Scubaqua & Dive Statia over the years 2007 to 2013 is shown.



Table 1. Number of divers Scubaqua & Dive Statia I. Walther, personal communication, 1 December, 2014)

Year	# of Divers
2007	300
2008	250
2009	400
2010	500
2011	536
2012	600
2013	700

Table 2. Number of dives Scubaqua & Dive Statia (I. Walther, personal communication, 1 December, 2014)

Year	# of Dives
2007	2155
2008	2077
2009	3409
2010	3706
2011	5022
2012	5385
2013	5700

Scubaqua & Dive Statia believe they will continue growing for the next couple of years and aim to have 1300 divers dive with them in 2016 (I. Walther, personal communication, 1 December, 2014). They estimate that around 80% of all the dive tourism on St. Eustatius dives with Scubaqua & Dive Statia (I. Walther, personal communication, 1 December, 2014). From all of their guest, 60% of the divers are repeat visitors. Scubaqua & Dive Statia estimate there were around 1200 dive tourists in 2013 on St. Eustatius (I. Walther, personal communication, 1 December, 2014).

Golden Rock Dive Center is the other dive center on the island. Two people own the dive center and they have worked in the dive business on the island for 20 years. Golden Rock Dive Center has also a high rate of repeaters. One of the owners thinks this is the case because *“the quality of the product is so good from a diving standpoint”* (G. Faires, personal communication, 3 December, 2014). However, they are not sure about the exact percentage of repeat visitors. They guess that around 30% to 40% are repeaters (G. Faires, personal communication, 3 December, 2014). The dive center visits several dive fairs each year in order to promote Golden Rock Dive Center and the island. Additionally, they focus on the use of social media and social marketing. Aside from the dive center the owner, Glenn, is also busy with the development of the Dive Glide. The Dive Glide is the owner’s invention, and it is a *“buoyancy glider for free diving and scuba diving...creating forward motion to propel a diver through the water”* (Golden Rock Dive Center, n.d.).

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#### 2.1.3 ST. EUSTATIUS TOURISM DEVELOPMENT FOUNDATION

The Tourism Foundation is in charge of the tourist office in St. Eustatius. Additionally, it is responsible for the promotion and the development of tourism on the island. According to the website, its vision is to *“develop St. Eustatius into a tranquil and captivating special interest tourism destination, both unique and sublime”* (St. Eustatius Tourism Development Foundation, n.d.). The Foundation strives to improve the facilities on the island for the tourists, and it wants to educate the locals about the importance of tourism for the island. The director of the foundation is Mister C. Lindo, who stays in close contact with the commissioner of tourism, Mister C. Tearr.

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#### 2.1.4 ST. EUSTATIUS HISTORICAL FOUNDATION

The historical foundation is responsible for the promotion and exploration of the rich history of St. Eustatius. This resulted in the St. Eustatius Historical Foundation Museum, where the history of the island is explained with several artefacts from different times. Additionally, the foundation is responsible for historical walking tours, historical information signs, and the creation of information guides. The historical foundation works closely with the St. Eustatius Center for Archaeological Research (SECAR). Its aim is to protect and develop the historical resources on the island both on land and underwater. Moreover, SECAR wants to promote cultural tourism and education about history and preservation.



### 3. Theoretical Framework



*Scubaqua & Dive Statia ©*

When investigating the diving world, it is necessary to look at the different elements that play a role in the industry and how they are linked to each other. In order to do this, social practice theory will be used. This way of researching special interest tourism will help to resolve the knowledge gap. Normally, dive tourism research has only been conducted from an environmental perspective, addressing environmental issues. This research will be conducted from social practice theory perspective, which will help decrease the knowledge gap. However, before discussing the social practice theory, diving tourism will be addressed. This will be followed by a discussion of the social practice theory, and this theoretical framework will conclude with some examples of case studies.

### 3.1 DIVING TOURISM

Diving has been a leisure activity for many years, but according to the WTO and PADI, the dive tourism industry has become a growing sector in the last decade. The WTO even argued that dive tourism is no longer a niche in the tourism market but has transformed into mass tourism (Garrod & Gössling, 2008). In the Tourism 2020 vision of the WTO (2001), the organization indicated that this increase can be derived from the fact that the world is increasingly explored. People want to discover new places, and therefore, many people are attracted to the 'undiscovered' underwater world. In the Tourism 2020 vision, the WTO (2001) defined scuba-diving tourism as follows:

*Persons travelling to destinations with the main purpose of their trip being to partake in scuba diving. The attraction of the destination is almost exclusively related to its dive quality rather than any other factor, such as the quality of accommodation or land-based attractions.*  
(p. 85)

However, this WTO definition can be argued. This definition excludes tourist that go diving during their holiday but also enjoy the environment and other activities during their vacations. The definition also excludes tourist that go on a holiday without the motivation to go diving but start to go diving during their vacations. Moreover, not all the people travelling to a destination with the main purpose of diving are tourists; these can also be individuals who dive for study- or business-related motivations. Hence, this definition is not suitable to use when investigating the social practice of diving at St. Eustatius. In the book *New Frontiers in Marine Tourism*, Garrod and Gössling (2008) defined diving tourism in this way: *"Diving tourism involves individuals travelling from their usual place of residence, spending at least one night away, and actively participating in one or more diving activities, such as scuba diving, snorkelling, snuba, or the use of rebreathing apparatus"* (p. 7) . This

definition seems to fit better for this research, but snuba diving will not be included in this study. Snuba diving is a mix between snorkelling and diving, and it is possible up to a depth of six metres. The advantages of snuba are that divers do not need any certificates or training and need less equipment. However, on St. Eustatius, none of the dive shops has the equipment for snuba diving, and therefore, it will not be included in this research. This research wants to understand the social practice of diving, thus it will be interested in scuba divers, snorkelers, and divers who use rebreathing apparatus since these are all forms of diving. Because all the different divers are centred around the dive shops, it will be easy to detect those people and asks them for their collaboration in this study.

For this research, it also does not matter if the tourist spends at least one night away. The chance that the tourists visiting St. Eustatius spend at least one night away from home is already large since there are no direct flights available from North America and Europe. Secondly, almost all the tourists that arrive on St. Eustatius do this by plane, and it is not recommended to immediately dive after flying. For this research, the following definition of diving tourism is suitable:

*Diving tourism involves individuals travelling from their usual place of residence to St. Eustatius who are, at the island, actively involved in one or more diving activities, such as snorkelling, scuba diving, or diving with the use of rebreathing apparatus.*

Thus, diving does not have to be the main reason to visit St. Eustatius, but it is an activity the tourist undertake while spending time on the island. Hence, individuals whose main purposes to visit the island are business-related, but participate in diving during their leisure time, are taken into account for this research.

This research will try to obtain a better understanding of diving. In order to gain a better understanding of diving, it is important to know who the people are that practice diving. This will help to create an understanding in the socio-economic profile of the divers and, therefore, answer the sub-question of this research. To create a socio-economic profile of the divers, this research will focus solely on scuba divers due to the existing statistical data since these are focused on scuba divers only.

Many dive organisations have collected statistical information about individuals who obtained dive certificates with them. However, it is important to keep in mind that the statistical information is not representative for the divers who travel somewhere to go diving (Garrod & Gössling, 2008). As mentioned before, the diving world has been, for decades, a male-dominated sport; however, this is argued because research showed that the image of scuba diving is transforming in a way that more

female divers participate (Musa, Kadir, & Lee, 2006). The Worldwide Corporate Statistics from PADI show that the diving industry is still a bit dominated by males, although to a lesser extent than it used to be. However, still 65,5% of the divers from PADI were males in 2013 compared to 34,5% females (PADI, 2014). Most studies claim that the average age of divers is between 30 and 40 (Garrod & Gössling, 2008). The average age of divers certified by PADI is 29 (PADI, 2014). However, it is difficult to say if this is also the case with individuals who go on holiday to dive. Garrod and Gössling (2008) assumed that individuals started diving at an earlier age than they begin to take diving holidays. The sport is dominated by individuals who are mostly well-educated; many times this is linked to the relatively high cost of the sport and a financially secure income is needed to actively participate. Research also shows that dive tourists are usually more experienced and have more dive certifications than the average diver. Although there is a lot of statistical information about divers, it is not possible to use this as a classification for dive tourist. Additionally, among dive tourists there are differences. For example, there is a great diversity between the motivations of divers to go on a holiday (Garrod & Gössling, 2008). For St. Eustatius, it is important to gain a deeper understanding in diving, as well as for the socio-economic profile of the divers in order to manage the visitors, ensure sustainable tourism, and for marketing purposes. In order to gain more insight into the socio-economic profiles of the divers, it is important to examine different segments of dive tourists.

The WTO (2001) and the book *New Frontiers in Marine Tourism*, by Garrod and Gössling (2008), created different segments of the dive tourist. In Figure 2, the WTO's sub-market segments are shown, and in Figure 3, the possible continuums of diving tourist from Garrod and Gössling (2008) are shown.

- **Cheap and cheerful** – mainly young, often organised low-cost dive holidays;
- **Dive fanatics to short-haul destinations** – sole purpose of travel is diving, usually travel in groups with clubs/friends;
- **Dive fanatics to long-haul destinations** – well-off, keen to dive during a beach resort long-haul holiday or sole purpose is to dive;
- **Sideline divers** – make one or a few dives on a general family beach resort holiday

#### *Continuums of diving tourists*

*Mainliners–Sideliners*, i.e. those for whom the travel motivation is primarily diving vs. those for whom tourism is the main motivation  
*Fanatics–Dabblers*, i.e. those for whom diving is central to their lifestyle vs. those for whom it is peripheral  
*Experienced–Novices*, i.e. those who have made many dives vs. those who are new to diving  
*Highly qualified–‘Try’ divers*, i.e. those who are highly trained vs. those who are completely untrained  
*Specialists–Generalists*, i.e. those who specialise in one diving activity, e.g. underwater photography vs. those who like to participate across the full range of diving specialties  
*Mariners–Socialisers*, i.e. those primarily interested in marine encounters and experiences vs. those putting a high value on social contacts and interaction  
*Independents–Group divers*, i.e. those diving by themselves or with a partner vs. those preferring to dive in organised groups  
*Learners–Enjoyers*, i.e. those trying to expand their knowledge of marine environments vs. those who are primarily interested in the dive experience itself  
*Homies–Remoties*, i.e. those regularly and mostly diving at home vs. those diving abroad, often in remote locations

Figure 2. Submarket segments (WTO, 2001)

Figure 3. Possible continuums of diving tourists (Garrod & Gössling, 2008)

These different segments of dive tourist were created with the use of market segmentation. Market segmentation can be defined as *“a process by which a large, potentially heterogeneous market is divided into smaller more homogeneous components or segments”* (Palacio & McCool, 1997, p. 236). Thus, market segments are created on the basis of similarities and dissimilarities in a market. Garrod (2008) explained that market segmentation helps organizations that pursue sustainable tourism; they can use the information base *“...to make their strategies effective”* (p. 35). There are different approaches to dividing a market into segments. Usually, it is useful to collect geographical information on the market. For St. Eustatius, it is valuable to know from where the divers are travelling, their places of residence, and their nationalities. Socio-economic data divides the market into groups based on profession and income (Garrod, 2008). For St. Eustatius, it is interesting to investigate if the divers have high incomes. The diving sport is a relatively expensive sport, especially when also travelling to different destinations. The travel expenses for St. Eustatius are also quite high, which makes a trip to the island costly. Previous research from the WTO (2001) showed that the average income of a diver in the US is around \$80.000 (€61.800), which is higher than the average income of an international tourist.

Geographical, socio-economic, and demographic data already provide considerable information about divers, but it is also useful to know more about the involvement and specialization of divers. Several literature studies about sports and adventure tourism have used involvement and degree of specialization in addition to the geographical, socio-economic, and demographic data. Kim, Kim, and Ritchie (2008) researched the involvement/specialization in golf tourism. They used six variables: *“golfing stroke, number of overseas golfing trips since 2000, number of overseas golfing trips since 2003, number of golfing magazine subscriptions, age at which they started playing golf and expenditure on golfing equipment since 2003”* (Kim, Kim, & Ritchie, 2006, as cited in Garrod, 2008, p. 37). The outcome of the data resulted in three different market segments: Beginner, Intermediate, and Advanced golf tourist. This research was conducted for golf tourists, but some of the elements can be used when investigating the involvement/specialization of scuba diving tourist. For both sports, the equipment is of high importance. Without golf equipment, it is impossible to play golf, and without diving equipment, it is impossible to dive. Thus, both sports are strongly dependent on the material; therefore, it would be useful to gain more insight into the equipment of divers. Another element that can be used for investigating scuba diving tourism is the experience level of the diver. In Kim, Kim, and Ritchie's (2008) research, this is called golfing stroke. The experience level of the diver mainly depends on two elements: the number of certifications and the number of dives. It is useful to implement these two elements into the research.

The involvement and specialization together with the socio-economic and demographic information will help to gain insight into the socio-economic profile of the scuba diver at St. Eustatius.

### 3.2 SOCIAL PRACTICE THEORY

In order to understand the practice of diving, it is important to have more insight into the context of this phenomenon. An outline of the context of diving is shown in Figure 4 (see also Appendix 2).

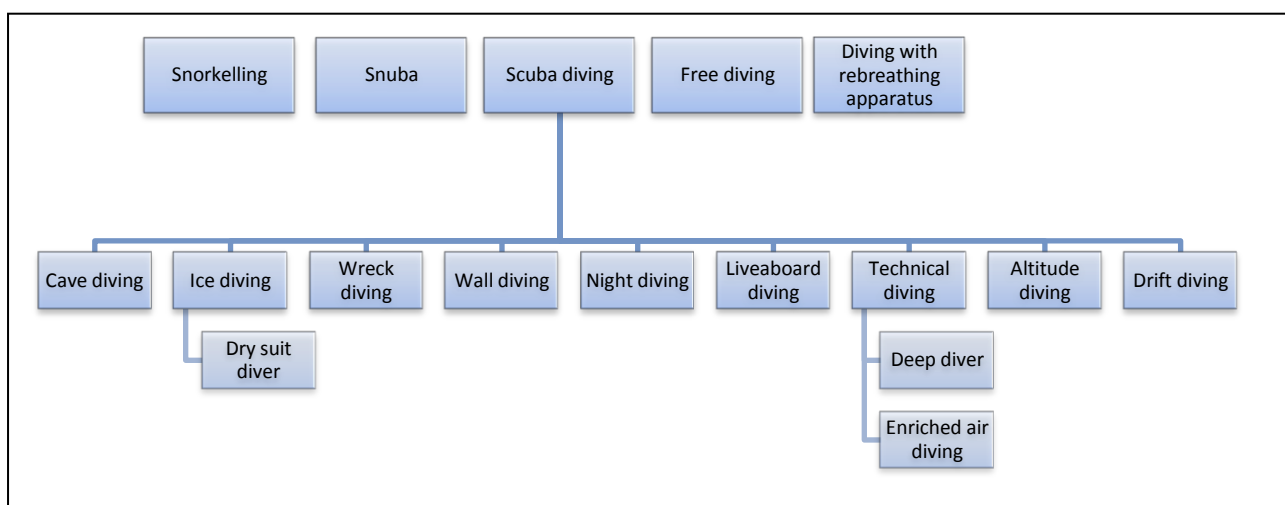


Figure 4. Overview of types of diving

According to the social practice approach “a practice is a routinised type of behaviour which consists of several elements, interconnected to one another” (Warde, 2005, p. 133). Those elements are “forms of bodily activities, forms of mental activities, ‘things’ and their use, a background knowledge in the form of understanding, know-how, states of emotion and motivational knowledge” (Warde, 2005, p. 133). In social practice theory, these elements are combined into three different elements: Material, meaning, and competence. Together these three elements form a practice. However, to form a practice, there needs to be a “sustained circuit of reproduction” (Pantzar & Shove, 2010, p. 450). Therefore, in order for a practice to exist, it needs to be reproduced constantly by the performers of that practice.

Pantzar and Shove (2010) identified three different ways in which the elements can exist. The first is that the elements are not (yet) integrated. This means that the different elements exist and that they

*“have histories and futures of their own”* (Pantzar & Shove, 2010, p. 450) but there are no links between the elements. Thus, there is no practice.

For the second, the elements are interconnected. This means that there is a practice. Nevertheless, the practice is not fixed because the elements are constantly transformed due to the integrations in practices. It is an ongoing process in which the elements are connected to each other. Practices consist of ‘doings’ and ‘sayings’, which means that during analysis there should be attention on both the practical activity and the representations of the practice. Practices require performance; an individual is the ‘performer’ of a practice. By doing things, for example diving, people are the practitioners who *“combine the elements of which these practices are made”* (Shove, Pantzar & Watson, 2012, p. 14).

In the last formulation, the links between the elements were made, but they no longer exist. Thus, at one point in time, the practice existed but not anymore since there are currently no more links between the elements. These possible formulations are illustrated by Pantzar, Shove, and Watson (2010) in Figure 5.

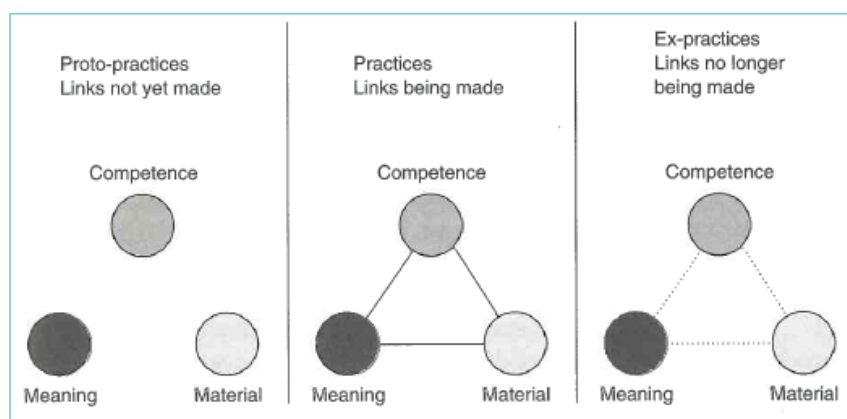


Figure 5. Proto-practices, practices, and ex-practices (Pantzar, Shove & Watson, 2010).

Practices are not fixed phenomena. Humans reproduce practices and connect them to other activities (Pantzar & Shove, 2010). Due to the productions and reproductions by humans, practices are social. Reckwitz (as cited in Warde, 2005) explained that *“it is a type of behaving and understanding that appears at different locales and at different points of time and is carried out by different body/minds”* (p. 135).

This framework will help when considering how the elements are combined and linked to form a practice. When investigating diving on St. Eustatius, it is necessary to examine the different elements

that form the practice of diving tourism on the island. Thereby, it is first important to separately explore the different elements of the practice and think about the relationship between the elements. This relationship is constantly changing since practitioners perform the practice and the elements shape each other. An example of this is the participation of women in diving. The image of diving used to be related to health and danger. This image did not make it attractive for women to participate in diving. However, elements are constantly reproduced, which include the creation of new links and the disappearance of links. This resulted in the elements of diving changing over the last years; diving is no longer related to danger due to many regulations but instead to adventure. Because the elements constantly change, a different image of diving was produced. This resulted in more women participating in diving over the last years. Additionally, new techniques and equipment, as well as the rise of dive organizations, such as PADI, and the change of the meaning change the elements. Pantzar, Shove, and Watson (2012) explained that elements *“are not just interdependent, they are also mutually shaping”* (p. 32).

When exploring the different elements of the practice, there should be emphasis on the ‘doings and sayings’ that play a role. Thereby, it is necessary to recognize that there are multiple ways of ‘doing’ the practice of diving. An example of this is shown in Figure 4, where multiple ‘doings’ of the practice diving are shown. Those multiple ‘doings’ all consist of the elements material, skills, and meaning, but all the ‘doings’ have a unique combination of the elements. However, a practitioner can be only involved in a single ‘doing’ or practice (Kuijer, 2014). Instead, practices can interact because they take place in the same location, for example St. Eustatius. Moreover, materials can connect different ‘doings’ of the same performance. The same material can be used to go wreck diving and also for drift diving in St. Eustatius. On the other hand, materials can also create different ‘doings’ since different materials are needed for ice diving than for diving in St. Eustatius. However, for all the different ‘doings’ of diving, the three elements are necessary. The elements shape each other, and therefore, all the elements have unique characteristics that fit, for example, the practice of ice diving compared to another ‘doing’ of diving. As an ice diving practitioner, different skills and materials are needed than for liveaboard diving. Both practices will also have different meanings attached to the practices due to the interaction with the other elements.

Thus, all the different ‘doings’ of diving consist of three elements that have unique characteristics. Also, Figure 3 is an example of the multiple ‘doings’ of diving. However, the figure does not show, as Figure 4, multiple ‘doings’ of the practice of diving, but it shows multiple ‘doings’ of practitioners of diving, which results in multiple ‘doings’ of diving. For example, the experienced divers will be more likely than the novices to be active in a ‘doing’ of diving that involves a higher level of skill and a greater usage of more materials. The experienced divers will also attach a completely different



meaning to the practice of diving compared to the novices, who just learned the basic principles of the practice of diving.

Thus, it is important to keep in mind that multiple 'doings' of diving can be performed by the same group of performers. Additionally, practices are shared; there is no such thing as an individual practice (Kuijer, 2014)

In the next sections, the different elements will be separately discussed. In order for a practice to exist, it is necessary that all three of the elements come together and form a practice (Shove, Pantzar & Watson, 2012). The three elements do exist apart from each other, but when these elements do not connect, there is no practice. In order to analyze the practice, it is useful to understand the separate elements.

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### 3.2.1 MATERIAL

It is essential to understand the materials involved in a practice, since "not only bodies but also artefacts are sites of understanding" (Reckwitz, 2002b, p. 213). Thus, "*both the human bodies/minds and the artefacts provide 'requirements' or components necessary to a practice*" (Reckwitz, 2002b, p. 212). According to Reckwitz (2002b), material enables and constrains a practice. Therefore, it is necessary to examine the materials related to the practice of diving. Material is not something fixed; instead, new materials will enable transformation of a practice. However, new materials will not shape the practice by simply introducing new equipment; there should be interaction between the material and the practitioners who incorporate the materials into their performances (Kuijer, 2014).

Material plays an essential role when examining diving since it is almost impossible to dive without appropriate materials. However, for basic forms of diving (free diving and snorkelling) less material is needed. For both forms of diving, air supplies are not necessary; the required gear only includes a mask, snorkel, fins, and weights (Garrod & Gössling, 2008). The equipment necessary to go scuba diving depends on different circumstances, such as temperature, water conditions, and weather conditions. When diving is performed in the Caribbean, different materials are essential than for diving in the red sea, for example. There are many different materials involved in the practice of diving. For that reason, only a limited number of important diving gear will be discussed.

First, a diver needs a mask to be able to see underwater. Without a mask, seeing underwater is impossible, and diving without a mask is not safe. Although the Caribbean Sea is not cold, it is useful to wear a diving suit. This preserves body heat because the deeper a person dives in the water, the colder it becomes. Diving suits also protect against stinging creatures. Also, fins are important equipment when diving. They make the diver more mobile in the water, and they also help to

maintain energy to dive. Regulators make it possible to breathe the oxygen from the tank, and therefore, both regulators and tanks are essential. Without those materials, it is impossible to breathe underwater. The buoyancy control device is worn by divers to establish positive buoyancy at the surface of the water and neutral buoyancy underwater. The buoyancy control is important for divers because they need to know how to float, sink, or hover in the water. In addition to the buoyancy control device, many divers need some extra weights and a weight belt to ensure neutral buoyancy underwater. A dive computer is not necessary equipment, but it is helpful to limit the chances of decompression sickness. It is possible to calculate the decompression limits with a table, but it is more precise to do this with a dive computer.

In addition to all the scuba diving gear that is needed for diving, many times a boat is a necessity to be able to arrive at the different diving spots.

The element material is not limited to the actual dive material needed to perform the practice. Material also includes the dive environment since this is essential too. The dive environment includes the natural material underwater, the manmade material underwater, the temperature of the water, and the conditions underwater. The natural material of the underwater world consists of corals, fish, and the reef. The natural environment is something that makes a dive site interesting. It is even questionable if a dive site would exist without the fish, corals, or reefs. Without those natural materials, a dive site does not have much to offer a practitioner. There are also manmade materials underwater, such as artificial reefs, which can be wrecks, underwater sculptures, reef balls, and anchors (new and old). These can be created to attract marine life, but they also form an attractive landscape underwater. The temperature of the water and the circumstances underwater are conditions divers can be attracted by or they can be unappealing. The conditions are a part of the underwater material divers have to deal with whenever they dive. They greatly influence the type of dive equipment needed. Additionally, the conditions also connect to the meaning that individuals relate to diving. For some practitioners, diving will be solely related to an exotic image. The dive conditions are related to the meaning that individuals attach to the practice.

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### 3.2.2 COMPETENCE

The element competence includes the *“learned bodily and mental routines, including know-how, levels of competence and ways of feeling and doing”* (Kuijer, 2014, p. 26). Know-how refers to how one should act, for example as a diver, but it is also about the way one talks, if one uses dive jargon for instance. Competence refers to shared knowledge, what is good, what is bad, learned knowledge, and bodily/mental competence in order to perform practice in the appropriate way (Kuijer, 2014).

Diving presumes certain knowledge and skills about how to use the equipment, how to use the diver's body, and other knowledge about the safety, sea life, and ethics/rules underwater. Many different training institutes have different courses to learn how to dive. However, the largest institute worldwide is PADI. Due to PADI and other dive institutions, there is a standardization of knowledge. However, it is important to keep in mind that knowledge is usually *“modified, reconfigured and adapted as they move from one situation or person to another and as they circulate between practices”* (Shove, Pantzar & Watson, 2012, p. 52). Thus, this knowledge is not fixed, and the content may change overtime because it is transferred between different people.

Before the different types of certifications will be discussed, it is important to know that diving is something people always do together. Diving with a 'buddy' is part of the safety procedures; it decreases the chance of being in an emergency situation, and it increases the chance of surviving an accident underwater. The buddy system is something that plays an important role during the training for certification. A couple of certifications from PADI will be discussed because they contribute to the competence of the divers. Appendix 2 shows a figure with all the PADI courses and an educational hierarchy of the courses:

- PADI Open Water Diver  
This is the basic diving certification. During this course, the student develops knowledge about pressure affects, dive gear, and basic scuba diving skills (PADI, 2010).
- Advanced Open Water Diver  
To enter this course, the Open Water Diver certificate needs to be achieved. This course will give the diver more experience and confidence. The student will enlarge his or her scuba skills through adventure dives (PADI, n.d.)
- PADI Rescue Diver  
This course prepares divers to deal with emergencies. Students learn to avoid and manage problems in the water, and they learn to help themselves and their buddies in case of emergencies (PADI, n.d.).
- PADI Specialty Diver  
There are many different Specialty Diver courses available. Each of those courses helps the student to gain specialized knowledge in a field. Examples of the Specialty Diver courses are Deep Diver, Night Diver, Wreck Diver, Drift diver, AWARE–Fish identification, etc. (PADI, n.d.).
- PADI Divemaster  
This course prepares divers to become dive instructors themselves. The course includes numerous topics and workshops to ensure that the student will become a well-educated and

skilled dive master (PADI, n.d.). Not everyone who obtains a Divemaster certificate will start working as a Divemaster. Some just do it for the experience and the development of skills.

- PADI Enriched Air Diver

This course is also known as the Nitrox course. Many divers have this kind of certificate because it enables them to dive with enriched air instead of normal air. The advantages of enriched air are that it gives a diver increased no decompression time, which allows him or her to stay longer underwater (PADI, n.d.).

Training is necessary not only for the divers but also for the dive destinations. Divers can have influence on the marine ecosystem, and therefore, the institution centre together with the dive schools can play a role in the management of divers' behaviours (Garrod & Gössling, 2008).

The knowledge and skills that the dive center teach their students is developed by the dive organization. What kind of skills, knowledge, and awareness is transferred from the dive organization depends also on the dive centre and the dive instructors. In Figure 6, the educational structure of the dive industry is shown (Garrod & Gössling, 2008).

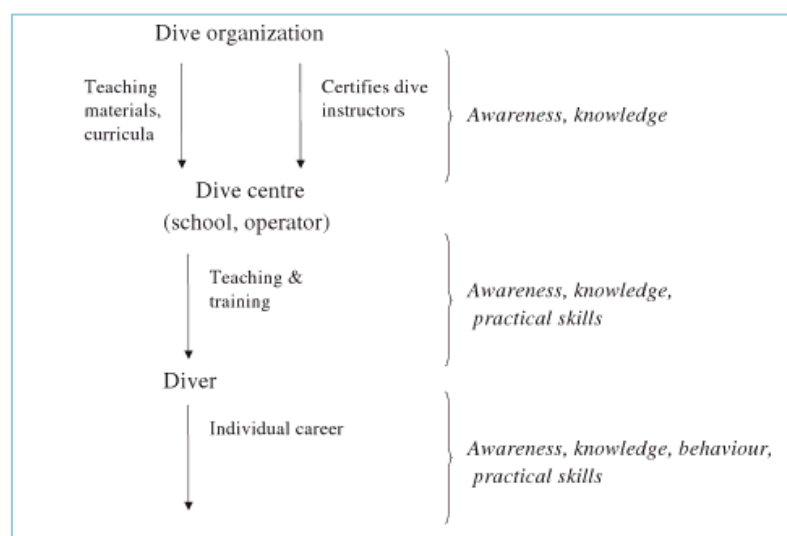


Figure 6. Educational structure of the dive industry (Garrod & Gossling, 2008).

However, the competence of the divers does not only depend on the knowledge they receive during their training. The competences of divers also depend on their total number of dives. Divers will gain more experience and knowledge when they conduct more dives. In addition, the kind of diving destination and the type of diving (as shown in Figure 4) will have influence on the competences of a diver. Divers keep track of those competences in a personal dive log. This dive log contains basic

information, the conditions, and the equipment used during each dive. Thus, not only the dive certificates indicate the level of competence of a diver, but there are also other indicators that can determine the competence. Together with the certificates, this will help to determine the competences of the divers.

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### 3.2.3 MEANING

Shove, Pantzar, and Watson (2012) described meaning as *“mental activities, emotion and motivational knowledge”* (p. 23). Another way to describe this is as *“the social and symbolic significance of participation at any one moment”* (p.22), as Shove et al. (2012) did in the book *The Dynamics of Social Practice*. However, the meaning individuals attach to the practice is not the core of the analysis. It is about the shared ideas connected to the practice. These shared ideas form the element meaning. Thus, meaning is not something that is fixed since practices *“are maintained and transformed when performed by people”* (Kuijer, 2014, p. 30). When new or other practitioners become involved in the practice, the meaning also changes, which will influence the links with the other elements and the elements themselves. For example, the meaning of the practice has transformed over the years. When diving became marketed commercially in the 1940s and 1950s, the meaning of diving was connected with adventure but, at the same time, danger due to the many accidents (MarineBio, 2004). Around the 1960s, several training institutes were developed that transformed the meaning of diving and connected the meaning with nature, adventure, and freedom (MarineBio, 2004). However, it is important to mention that not one single element of the practice transforms. All the elements form and transform each other since they are mutually shaping.

Meaning, as described by Shove (2012) is quite comparable to the teleoaffective structure of Schatzki (2002) who explained this as *“the property of a practice linking its doings and sayings to a range of acceptable ends, purposes, beliefs, projects and task that ought to be accomplished”* (p. 80). In order to understand the shared ideas and beliefs connected with diving at St. Eustatius, the concepts, emotions, and motivations associated with the practice will be studied. Thus, the element meaning helps to understand the shared meaning or essence that divers assign to the practice. This element of social practice theory is not as tangible as the other elements of theory, but nevertheless, it is of key importance to understand the element meaning. Again, individuals are not the central part in social practice theory. Therefore, it is interesting to understand the role of individuals in social practice theory, which is explained by Reckwitz (2002a). Reckwitz (2002a) saw individuals as *“body/minds who ‘carry’ and ‘carry out’ social practices”* (p.256). In practice theory, not only individuals are of importance but also the human body since this is the carrier and the performer of a practice (Kuijer, 2014). However, Reckwitz (2002a) described individuals as body/minds, which means that practices are not only bodily routines. This can be explained by Schatzki (as cited in

Kuijer, 2014), who observed that *“people can explain almost all of their actions in great detail”*, and, therefore, recognized the presence of the mind. To return to understanding how to research the element meaning with practitioners and carriers of the practice, it is important to examine Reckwitz’s (2002a) definition of a social practice: *“A practice is social, it is a ‘type’ of behaving and understanding that appears at different locales and at different points of time and is carried out by different body/minds”* (p. 250). In order to investigate the element meaning, it is necessary to understand diving at St. Eustatius by studying the different body/minds in different points of time.

As shown in Figure 4, different ‘doings’ of diving can result in multiple meanings toward diving. However, the meaning is also related to the various types of levels of commitment, which can range from no commitment to full commitment. This is comparable with level of competence that can differentiate between practitioners from beginner to expert, as explained by Shove et al. (2012). Due to the multiple ‘doings’ of the practice, there are multiple interpretations of diving which result in multiple meanings. When a certain meaning connects to skill and material, a ‘doing’ of the practice of diving can exist.

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#### 3.2.4 PRODUCERS OF THE PRACTICE

The practice of diving is not only a process in which practitioners are involved, but also producers. Shove and Pantzar (2010) explained that it is important to explore the dynamic relationship between the practitioners and providers. However, in order for a practice to exist, it needs to be constantly reproduced by the practitioners. Thus, not only the producers, but also the practitioners, of a practice have the control (Pantzar & Shove, 2010). The producers and the elements are related to each other since the producers play an important role in training the practitioners. They help form the meaning of diving. They are also distributors of materials, and they keep up with the maintenance of materials (sometimes also in the dive environment). Even in St. Eustatius, practitioners are not allowed to dive without a dive center. Thus, on the island, the producers are necessary in order to perform the practice. Hence, both practitioners and producers are *“involved in constituting and reproducing practices”* (Pantzar & Shove, 2010). Therefore, practices are not only shaped by the practitioners but also by the producers. Hence, it is necessary to examine the role of the producers on St. Eustatius. However, when examining the role of the producers, it is necessary to consider that practitioners are the actual ‘carriers’ of the practice (Pantzar & Shove, 2010). Producers, like the dive center or the tourism foundation, cannot make the practice of diving happen, but it is still important examine the relationship and the dynamic among the practitioners, producers, and the elements.

### 3.3 CASE STUDIES

Until now, diving has not been analysed using social practice theory. However, there have been a number of studies on diving that give some insight into aspects of diving.

In the research on diving tourism on the island Sipadan, the author, Musa (2002), formulated some management priorities. These management formulations used the level of competence to differentiate the divers. According to this article, access to the island should be only permitted for scuba divers with experience. Other types of diving, such as snorkelling, should not be permitted on the island. Moreover, scuba divers with only the basic diving certificate (for example an Open Water Certificate) should not have access to the island in order to sustain the ecological balance. This research used the element competence of social practice theory in order to differentiate the divers who were able to dive on the island.

Musa (2006) conducted another research study about diving satisfaction in Layang Layang. This research showed that the element material can be an important moderator not only for the overall satisfaction of a destination but also for the satisfaction of the practice. In this case, the divers were not satisfied about the rental equipment on the island, which resulted in lower satisfaction.

In this research, Musa (2006) used the different types of divers from Rice (1987) for the identification of a diver's profile. Rice (1987) classified three different types of divers. He identified the 'hard core' diver, 'the tourist', and the 'potential' diver. In Layang Layang, Musa (2006) identified 46,9% of the divers as 'hard core' divers, which means that the main reason for visiting this location was the local diving conditions and the flora and fauna.

Market research has been conducted by Kenniscentrum (Kust) Toerisme to gain more insight into the divers' potential for the province Zeeland in the Netherlands. Based on the research investigation, five different divers' typologies were created (Nederlandse Onderwatersport Bond, 2011):

- Luxury and enthusiastic divers
- Sportive recreational divers
- Beginners
- Low-Budget dive fanatics
- Incidental holiday divers

Emphasis during this research was on the experience and the degree of expenses from the divers. Based on these five different typologies, possible opportunities were designed. For example, the

'low-budget dive fanatics' did not spend much money on tourism in the province, but they could be useful for the province when they turned into ambassadors for diving in Zeeland (Nederlandse Onderwatersport Bond, 2011). A detailed overview of the divers' typologies is shown in Appendix 4 (in Dutch only). This research was used to gain more insight into improvements for the province and for the differentiation of dive products for the different divers' typologies.

In addition to the case studies focused on diving, it is also interesting to explore research projects, although in other fields, that have been conducted from a social practice theory perspective.

For example, in Pantzar and Shove's (2010) article, they use social practice theory to investigate the practice of Nordic Walking. In the article, they examined the competence and skills needed to participate in the sport. They concluded that Nordic Walking is a new and distinctive form of walking that is linked with unique techniques. In this research project, the material involved was mainly the Nordic walking stick, which is different from a regular walking stick. The article also considered the different 'doings' of the Nordic Walking practice, including different meanings attached to the sport. For example, in Japan, Nordic Walking is seen as sport performed at leisure resorts. However, Nordic Walking in the United States is seen as sport that "*is about body shape and fitness*" (Shove, Pantzar & Watson, 2012, p. 60). The meaning of the sport is also greatly attached to the meaning that is given to Nordic Walking for marketing purposes, such as "*health, well-being, fitness, fun*" (Shove, Pantzar & Watson, 2012, p. 59). However, Pantzar and Shove (2010) were aware that, although producers are important, practices are highly dependent on the carriers of those practices.

Another completely different research project in another field of study is from Maller and Strengers (2011) in which they analysed "*the cooling practices of Australian householders*" (p. 154) with the use of social practice theory. Health, housing, and energy policies in Australia address the cooling practices in the country, which are necessary due to heat waves that can cause fatalities (Maller & Strengers, 2011). This research used the elements of cooling practices in order to investigate the practice. The element common understanding investigated the "*understanding of waste, luxury and necessity*" (p. 158), the element material gave insight into cooling technologies (excluding air conditioning) that households would use to deal with a heat wave, and the element practical knowledge was used to give an indication about the know-how of households to "*achieve coolth and adapt to heat*" (Maller & Strengers, 2011, p. 158). The different elements were investigated with the use of different interviews. This research used the social practice theory; however, it did not use exactly the same dimensions that are used in the research on St. Eustatius. Nevertheless, the element of common understanding can be seen as the element of meaning because, in the interviews, common understanding shows what kind of meaning practitioners had toward the use of



air-conditioning when dealing with heat waves. An example of this is the following section of an interview: *"I don't like the change from the room to when you go outside and it's hot. I'd rather get my body temperature acclimatised and then I'll be fine"* (Maller & Strengers, 2011, p. 161). It is interesting to see that, for Maller and Strengers's (2011) research, the elements differ from the elements used for the research into the social practice of diving. This is because there is no agreement about what exactly a practice is (Hargreaves, 2011). Some studies focus on the elements that form the practice, while others focus on the links between the elements. For this research into the social practice of diving, the approach from Pantzar, Shove, and Watson's (2012) book was used in which practices are assemblages of meanings, competence, and material *"that are dynamically integrated by skilled practitioners through regular and repeated performance"* (Hargreaves, 2011, p. 83). In Hargreaves's (2011) research, an important aspect of the use of the social practice theory was emphasised: The practice itself is the core of the analysis. This means that the individuals who perform the practice are not the core unit of analysis. However, it is important to keep in mind, as mentioned above, that practices are highly dependent on the practitioners/carriers who perform those practices. In this research, the individuals should give insight into the essence of diving, but not only individuals are involved in order to understand diving. Other sources will also give more insight. This can be, for example, the dive schools and observations of the divers. The focus will be on understanding the core of the practice of diving to discover the essence of diving.

## 4. Methodology



*Scubaqua & Dive Statia ©*

This research's fieldwork was conducted on the island St. Eustatius. This was completed during a six-week period from the end of October to the beginning of December. This period was chosen due to the relatively high visitor arrivals in November (One Caribbean, 2010) and due to the time span for this thesis, according to Wageningen University.

In order to understand the social practice of diving at St. Eustatius, a mixed method approach was used to gain insight into diving as a social practice and to create a socio-economic profile of the divers. When using the mixed methods approach, both qualitative and quantitative research are used in order to obtain data. The qualitative portion of this research will help to gain insight into diving as a social practice with the use of social practice theory. The quantitative portion will help to create the socio-economic profile of the divers. The quantitative part will result in more practical data, which will be useful information for the island. The qualitative data will result in an understanding of diving as a social practice. Together with the socio-economic profile, the data will give a deeper understanding into diving from a social practice theory perspective. Thus, this research will not only give insight into the socio-economic background but also into the motivations and emotions related to diving. Additionally, both the interviews and the survey will contribute to the understanding of the practice of diving. During this research, the divers were the main source for the survey input and the interviews. Additionally, interviews with important stakeholders, together with participant observation, contributed to the understanding of the practice of diving. Thus, the practice of diving was analysed with the use of the survey, the interviews, and participant observation.

Both studies took place simultaneously, which is called current triangulation (Boeije, 2010). Current triangulation is used when qualitative data and quantitative data enrich the overall research because they both represent different knowledge (Boeije, 2010).

#### 4.1 ETHICS

During this research, informed consent, the privacy of the participants, confidentiality, and anonymity were important. In order to ensure informed consent, the researcher explained the purpose of the research before the interviews. The survey began with an introduction text that enlightened the participant about the research. This way informed consent was guaranteed. The privacy of the participants was ensured because they could decide if they wanted to participate. When they participated, they could still decide whether they wanted to share their information. The

confidentially and the anonymity of the data was ensured because the surveys and the interviews were anonymous. Thus, the data was not connected to any personal names or unique characters.

## 4.2 STUDY SITE

This research's fieldwork was conducted during a timeframe of six weeks. The fieldwork started in week 44 and ended in week 49 of 2014. The research's study site was the island St. Eustatius. During the timeframe of this research, all the qualitative and quantitative data was collected on the island. Most divers were centred around the island's dive shops. This is the place where they were approached to participate in this research.

## 4.3 QUALITATIVE RESEARCH

The qualitative research needed to provide a better understanding of diving from a social practice perspective. In order to obtain this information, semi-structured interviews were used. The semi-structured interviews offered guidelines to the interviews, but the approach was still flexible (O'Leary, 2004). For this research, semi-structured interviews were used because they helped with a natural flow during the interviews (O'Leary, 2004), while they provided structure to stay on topic. The interviews were mainly informal due to the setting in which most interviews were held. Most interviews were conducted at one of the dive shops, a restaurant, or bar on St. Eustatius. All these places do not fit with a formal setting, especially not when considering that most interviewees were on holiday. The informal interview setting helped *"to establish rapport, gain trust, and create a more natural environment conducive to open and honest communication"* (O'Leary, 2004, p. 164). The researcher conducted all the interviews. Some interviews were one-on-one, but others were with two or three divers at the same time. In order to investigate the practice of diving, it did not matter if the interviewee were accompanied by friends or family who also contributed to the interview. The most important aspect of the interviews was that the focus should remain on the practice of diving.

In the six weeks of fieldwork at St. Eustatius, in total 20 interviews were conducted. There were 16 interviews conducted with 21 divers, two held with the two dive shops, one with the commissioner of tourism, and one with the director of the St. Eustatius Tourism Development Foundation. The interviews with the stakeholders gave additional background information about the divers, and they

were useful to gain a better understanding of the whole setting in which the diving took place. Moreover, it was important to talk to these stakeholders since they were the producers of the practice. The interviews held with the divers took around 40 to 50 minutes. During the interviews, several topics were discussed related to the elements of social practice theory. The interview schemes used can be found in Appendix 5 (English) and Appendix 6 (Dutch).

The interviewees were selected by selective sampling in order to gain *“a wide range of perspectives and experiences”* (Boeijs, 2010, p. 36). All the individuals that travelled from their usual places of residence to St. Eustatius and who were actively involved in diving activities were included in this research, but there was another important criterion. Due to the researcher’s language capability to only conduct the interviews in English or Dutch, it was necessary that the interviewees spoke at least an intermediate level of Dutch or English. Residents of the island who were active in the practice of diving were excluded from the research since they were not visitors. However, students who were temporary residents of the island and active in the practice of diving were included in the research because this involved individuals travelling from their usual places of residence to St. Eustatius.

Many of the divers willing to participate in the survey and who met the criteria for the qualitative part of the research were asked to also participate in interviews. The researcher tried to obtain a varied selection of interviewees in order to gain the best interview results.

Before all the interviews, permission was asked to audio tape the interviews. In addition to the audio tape, notes were taken in order to take into account the body language of the interviewee.

In addition to the interviews, participant observation also played a role during the qualitative research. According to O’Leary (2004), observations means: *“A systematic method of data collection that relies on a researcher’s ability to gather data through his or her senses”* (p. 170). With participant observation, the researcher is *“part of the team, community, or cultural group”* (O’Leary, 2004, p. 172). During this study, the researcher was part of the group of divers who visited St. Eustatius. The researcher is a diver herself and dived with the participants of this research. The researcher gave full disclosure about the research she was doing; a risk of giving full disclosure is that participant’s feel uncomfortable and are *“therefore less likely to act naturally”* (O’Leary, 2004, p. 173). In this study, it was not as likely that the participants would act less naturally since they came to the island to participate in diving, and that was exactly what the researcher was interested in. The observational techniques used during this research were unstructured; the researcher made *“judgement calls on the relevance of initial observations”* (O’Leary, 2004, p. 173) since the focus of the observation was to understand the essence of diving for the participants. This is not something that can be grasped in a single observation; it is a process. The researcher worked closely with the

dive schools during this study. The dive schools helped by giving information about the arrivals and departures of guests, and they also gave some additional background information about their guests.

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#### 4.3.1 DATA ANALYSIS

After transcribing the data, the content of the data was analysed in order to transform the information into findings. Open coding was used during the first round of data collection. The six topics that form the structure of the interviews helped with the open coding process because the interview topics provided for six different segments. The result of the open coding process was the coding scheme. The codes mainly consisted of theoretical concepts derived from the theoretical framework since the different segments of the interview scheme were already derived from the theoretical framework. In addition to the codes that were derived from theory, the code tree also consisted of in vivo codes derived from the data. After the open coding process, axial coding was used. This helped to distinguish the main codes and sub-codes (Boeije, 2010). This process of axial coding helped to indicate which parts of the research were more important in order to answer the research question. Axial coding helped to reduce and reorganize the collected data (Boeije, 2010). The next step in this process was selective coding. During this step, connections were made between the categories. This also created a 'core category', a category that is meaningful for the research and is connected to many other categories (Boeije, 2010). In the final phase of the data analysis, the findings of the data were shaped by the analysis process.

#### 4.4 QUANTITATIVE RESEARCH

Together with the qualitative portion, the questionnaire helped to better understand the practice of diving. The questionnaire included more practical questions that gave insight into the socio-economic profile of the divers.

The research combined the study's questionnaire with a questionnaire from another study. On St. Eustatius, the number of tourist was relatively low and exact numbers of tourist, let alone numbers of divers, were not available. Since the questionnaires of the two studies were combined, the response rate of the surveys increased because the timeframe in which the surveys were conducted was longer when the two studies worked together. By combining the two questionnaires, the timeframe increased from six weeks to eight weeks. The other study with which the questionnaire was combined examined the carrying capacity of the coral reefs in relation to diving tourism. This study was developed within the framework of the Triple P @ Sea research program, and it was part

of an internship for IMARES/WUR. The questionnaire from this other study enabled the researcher to assess the perceptions from the divers on landscaped reefs and diving on St. Eustatius.

It was possible to combine the questionnaires because both studies focused on diving tourism and they both used surveys. The questionnaire consisted of 43 questions divided over seven topics: St. Eustatius, Diving St. Eustatius, Diving, Crowding and Impact of Diving, Landscaped Reefs, and Demographic Information. Some of these topics only consisted of questions that belong to one study and some of these topics consisted of questions derived from both studies. The questionnaire designed for these studies was available in three languages: English (Appendix 7), French (Appendix 8), and Dutch (Appendix 9). In order to complete the questionnaire, an appendix was needed, which can be found in Appendix 10. The questionnaire was translated into different languages to ensure that the questionnaire was comprehensible for many individuals. The following question numbers were part of this research: 1-12, 18-23, 25-26, and 40-43. These questions were designed to create a socio-economic profile of the divers and to gain insight into the socio-economic meaning of the divers for the island. In order to obtain this information, questions dealing with demographic information, the stay of the participants at the island, their overall diving experience, and their diving experience at the island were included in the questionnaire.

The questions in the questionnaire that provided data for this study were both categorical and continuous. Within the type of categorical data, there were different levels of measurement used: Binary, nominal, and ordinal variables. Within the type of continuous data, the only level of measurement that was used was the ratio variable.

Normally, with quantitative research, an important part of the data collection is the type of sampling used and the sample size. For this research, a sample size was difficult to obtain. It was hard to acquire the right sample size because it was not clear how many people were in the total population. There was data available about the total number of tourist that visited the island, but it was not clear how many of those tourists were involved in diving. Therefore, it was impossible to estimate the total number of tourist that also dived during their stays at the island. This made it impossible to acquire the total population. As a result, it was not possible to obtain a sample size. In order to gain the best possible profile of the divers at St. Eustatius, this research tried to conduct the questionnaire with all the divers at the island during the research's timeframe. Thus, during this research a selective/purposive sampling method was used because, for this study, people were selected according to the aims of this research (Coyne, 1997). With purposive sampling, research is focused on particular characteristics. For this study, those characteristics were that the participants participated in the practice of diving on St. Eustatius and that they were temporarily visiting the

island. Within purposive sampling, there are different types of sampling. For this research, homogeneous sampling was used because the questionnaire's participants were a homogeneous group with shared characteristics. In total, 79 questionnaires were completed from 13 October to 5 December 2014. Unfortunately, due to the lack of statistical information about the population, it was not possible to say what percent of the total population was involved in this research.

However, it was possible to estimate this number because the researcher was aware of some limitations, which resulted in fewer participants for this study. First, during the timeframe of this research, some divers were not able to complete the questionnaire due to a language barrier. Secondly, individuals who visited the island with a yacht were hard to include in the research because many times they did not come ashore. Last, some divers were not included because the researcher did not have the chance to ask them to participate in her research. This only happened with divers who stayed on the island for no more than one night. Since the researcher was aware of divers who were not able to participate in this research, it was possible to formulate a rough estimation of the response rate. Probably 25 to 30 potential participants did not complete the survey during the timeframe of this research. According to these numbers, there was a response rate of approximately 80%.

Due to the shared characteristics of the homogeneous group, some individuals were excluded from participating in this research. This was the case with the residents of St. Eustatius. Some of them were active practitioners of diving. Another group excluded from participating was an UNESCO training group that visited the island for three weeks. The participants of the UNESCO group were enrolled in training that included a couple of dives during their overall course, but the participants were not actively involved in diving activities. The main reason for visiting the island was the UNESCO course that took place at the island; the diving was not an important part of this. Another reason why this group was excluded was due to the numbers of participants in the group. The UNESCO group consisted of 22 participants. Over an eight week period, 79 questionnaires were completed. If the UNESCO group had been included, the group's data would have had a significant influence on the overall socio-economic results. In addition, the language barrier sometimes caused exclusion of some individuals. This problem was minimized by translating the questionnaire into three languages, but some individuals were still not able to participate in the research due to the language problem. Another group of individuals that was included in the research were students who were temporary residents of the island and active divers.

During this research, it was important to keep in mind the limitations of this type of sampling method. This method heavily relies on the bias of the researcher since this person is the one



selecting the participants based on his or her judgements. Secondly, when using this method, generalisation of the research is at risk (Laerd Dissertation, 2012). However, this research was exclusively focused on St. Eustatius and the divers at the island; therefore, this sampling method seemed to give the best understanding of the practice of diving. Moreover, the questionnaires were conducted with most of the divers during the timeframe of this research. Thus, for this research, generalisation was not a risk since many divers participated and the response rate was quite high. This makes the participants of this research representative for the complete population.

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#### 4.4.1 MEASUREMENT PROCESS

The questionnaires were distributed by the researcher to almost all the divers at St. Eustatius during the timeframe of this study. The participants were asked to complete the paper questionnaire manually. All the paper questionnaires were collected and inserted manually into SPSS in order to conduct the tests for data analysis.

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#### 4.4.2 DATA ANALYSIS

For the analysis of the questionnaires, SPSS was used. For the categorical variables, the percentages or the 'count' of the frequencies of the variables were important. For the continuous variables, the frequency was not important. Instead, the focus was on the mean. The only statistical test used was the cross tabulation in order to examine the relationship between two variables. Cross tabulation helped to examine the relationship between the variable 'first visit or repeater at St. Eustatius' and the variable 'activities involved in other than diving'. In addition, the cross tabulation test was used in order to gain better insight into the relationship between the variable 'visits to other islands' and the variable 'first visit or repeater at St. Eustatius'.

Many questions in the questionnaire had multiple answer possibilities. Therefore, it was useful to use the SPSS function Multiple Response, which made it possible to create one variable from a multiple answer category. The multiple response option was used with questions 2, 4a, 8, 10, 18, and 25-26. Appendix 11 provides an overview of the types of test that were used in order to obtain the quantitative results.

### 4.5 RESEARCH LIMITATIONS

During the research fieldwork, there were some unexpected limitations that affected the final results. The largest limitation was the limited number of possibilities for conducting interviews and

questionnaires. The expected number of tourist that was derived from the statistical data from CBS did not give a realistic view of the size of the tourism industry on the island. The limited number of tourists during the research timeframe made it harder to conduct many interviews and questionnaires. Furthermore, this research was conducted during the start of the high season. In the beginning of the fieldwork period, it was noticeable that the tourism season just started since there were not many tourists on the island. During the last two weeks of the fieldwork, it was visible that the high season was underway because more tourists arrived on the island and the dive shops were more crowded. However, it was not possible to conduct the fieldwork during the busiest period of the high season, January and February, since this did not fit in the overall timeframe of this study.

Another limitation of this research was the language barrier between the researcher and possible participants. The tourists at St. Eustatius were from different nationalities, but quite a large number of the tourist came from French speaking countries. The researcher does not speak French and was only able to communicate in Dutch or English. Due to this language barrier, it was not possible to conduct interviews with divers who spoke French and were not able to speak English. In order to ensure that not only individuals who were able to speak English or Dutch were included in the research, the questionnaires were translated into three languages. This made it possible to gather representative data from the population. When translating the questionnaire into multiple languages, there is a risk that the questionnaire is not *“repeatedly measuring the same property”* which would limited the ability to measure the same outcomes (University of Wisconsin Survey Center , 2010, p. 6). Moreover, with questionnaires, there is always a risk of interpretation: Not every question will mean the same thing to everyone. This was, for example, the case with question 10 from the questionnaire: *“Where did you hear about this tourist destination?”*. This was sometimes interpreted as ‘Where did you hear for the first time about this tourism destination?’ which resulted in different answers. In addition, question 25 could be interpreted in different ways. The actual question was *“Could you check in what types of diving you have been involved?”* but some participants interpreted it as ‘Could you check in what types of diving you have been involved during your stay at St. Eustatius?’. This question needed to give insight into the types of diving the participants had been involved in during their overall diving career, not in the types of diving they had been involved in during their stays at the island. The researcher was aware of these interpretation issues with these two questions because a few participants asked her to specify.

Unfortunately, the questionnaire was only translated into Dutch and French. Therefore, the German-speaking individuals who did not speak English were not able to complete the questionnaire. Luckily, not much data was lost because the group of Germans that did not speak English was quite small.

In addition to the limitations of gathering the data, there were also limitations when analysing the data. When analysing qualitative research, the interpretation of the researcher is of importance. While coding, the researcher selects what is important, and he or she makes the connections between the categories. When coding is done by multiple individuals, this will result in different names for codes, different coding trees, and maybe even different connections between the codes. During this research, the researcher completed the coding process by herself; her interpretation of the text resulted in different codes and connections between the codes. Thus, the results are dependent on the interpretation of the researcher. In order to ensure the codes fit the data, the researcher decided to take a step back after the first round of coding. After a week, the researcher reviewed the data and the codes again and made adjustments. This step was repeated three times in order to ensure codes truly fit the data and that the connections made sense.

## 5. Qualitative Results



*Scubaqua & Dive Statia ©*

This chapter is the result of the seven weeks of fieldwork on St. Eustatius. In these seven weeks, research was conducted diving at St. Eustatius from a social practice theory perspective. To be able to understand diving from a social practice perspective, 15 semi-structured interviews were conducted with a total of 21 divers. All the interviews were conducted with respondents from different ages, nationalities, and backgrounds. The qualitative research took place in informal settings, such as the dive shops, the beach, a restaurant, or a bar. The names of all respondents have been replaced by fictional names in order to ensure that the respondents stay anonymous.

The interview findings resulted in different themes, which will be discussed according to the elements of social practice theory. In addition, the influence of the practice's producers will be discussed. The qualitative research findings also revealed the essence of diving.

## 5.1 THE ESSENCE OF DIVING

Apart from the beauty of the marine life, there is another motivation for all divers to be involved in diving. Being involved in diving enables the diver to enter 'another world'. A world in which there is no pressure from the outside world, no stress, and where one is able to relax. When divers are in this 'other world', they do not have to think about their everyday lives. Instead, they can enjoy the gravity, the surroundings, and the marine life. Bert explained how it felt for him to enter this 'other world': *"When I dive, it is the moment in my life where I have no anxiety, no fear, and no disturbing...When you dive it feels like you are in a spaceship. There is no gravity"*. Being in this 'other world' makes it possible to really enjoy the sea and the sea life because the divers do not have to think about anything: *"During diving you just think about diving, not about your problems. You just forget about your problems"* (Alain). All the elements of the social practice theory are in service of creating this feeling of being in 'another world'. For example, all the divers wanted to feel comfortable in the water. They all made sure they felt comfortable by obtaining more experience, more skills, and continuing their training. Claudia explained, *"With my experience, I can much more enjoy, really enjoy the dives"*, and Max agreed with that and believed *"development in diving gives you more freedom"* (translated from Dutch). When the divers knew they had enough experience and/or certifications, it enabled them to enjoy the water instead of worrying about things like buoyancy, breathing, or decompression limits. When this was natural, the divers could just be in this 'other world' and appreciate the underwater surroundings. Also, materials were important. Most practitioners had their own materials. This made them feel safe since the materials fit them correctly and they knew their equipment. Claudia agreed with this, *"I feel safer and more secure with my own*

*equipment because I know that I am in control*", and Jan felt *"More comfortable because you are used to it, and you know where to find everything"* (translated from Dutch). Thus, during a dive, they did not worry about safety because they knew that they took care of their equipment, and when an emergency happened, they knew where to find everything. Additionally, an improper equipment fit did not annoy them. Again, this enabled the divers to enter this 'other world' and to stay there since there was nothing to worry about. For the divers who did not have their own equipment, it was still possible to enter this 'other world'. Even though they did not have their own equipment, they trusted the equipment they rented from dive shops. Kees and Janneke explained, *"We trust the dive shop because of our standards when choosing them"* (translated from Dutch), and Alberto *"feels comfortable with the borrowed equipment"* since he had confidence in the dive shop. Due to this feeling of safety, these divers were still able to go to this 'other place'. All the elements made it possible to go to this place where the divers forgot about their daily lives and to enjoy the underwater world. This shows that the elements are connected and form each other.

In addition to the elements, there are also the practice's producers. The producers also play a role in the divers' ability to enter this 'other world'. The dive centers on the island only dive with small groups, which makes it not crowded underwater and enables divers to really enjoy the experience instead of feeling stressed watching out for other divers. Brenda loved that one of the dive centers uses the phrase *"The only school that you are not going to see is another dive school"*, and that this experience actually was true. In addition, St. Eustatius is a peaceful and tranquil island. It is extremely quiet and has an unstressful atmosphere. This helped the divers to relax when they were not in the underwater world. Jeffrey felt that *"The charm of the island is the fact that it is quiet"*, and also Jan believed that *"Many divers go to St. Eustatius because there is no mass tourism. They go to the island because of the quietness"* (translated from Dutch). For Bert, many different characteristics of the island make St. Eustatius a paradise on earth:

*It is not only the diving. It is the people; it is the island; it is the absence of tourist; it is the craziness of the place here; it is the friends I have here; it is the entire package!*

## 5.2 MEANING

The meaning of the practice of diving consists of the overall emotions, knowledge, and motivations of the individuals toward diving (Shove, Pantzar & Watson, 2012). Due to the existence of the multiple 'doings' of the practice of diving different meanings can exist. However, there are also

shared emotions, knowledge, and motivations that the respondents agreed upon. First, all the common characteristic toward the overall meaning of the practice of diving will be discussed. Later, the element meaning will be further specified due to the different 'doings' of the practice. However, it is important to keep in mind that the individuals who perform the practice are not the core of the analysis; the overall practice is the central part of the analysis.

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#### 5.2.1 LOVE FOR THE SEA AND MARINE LIFE

Diving is a practice characterized by the ocean and marine life. Thus, it is not a coincidence that the practitioners of diving have a special connection to the sea and the animals that belong to it. For all the divers at St. Eustatius, a motivator to be involved in the practice of diving is a love of the marine life and the sea. François emphasized his love for the marine life by saying that he always had *"a fascination about the nature and especially the life in the water"*. Also, Claudia loved to see all the different colours underwater and the fishes, and Danny and Tiffany just wanted *"to see great stuff"* underwater. Thus, for all the divers at St. Eustatius, the love of or curiosity to see marine life was an important motivator. However, it was not only the marine life that attracted them, but also the sea in general. Many practitioners said things that were similar to what Tiffany said, *"I love to be near the water and on the water"*, or Alain, who said that he loved the water. For most of the divers, the practice of diving was a natural next step to explore the underwater life, as Heinz explained: *"For me in the past I was swimming and I was snorkelling, and I wanted to go deeper. To see different fishes, different things"*. For many of the divers, this special connection with the sea was something that did not appear later in life, but it was something that had their interest since they were children. An example of this is from François: *"We always had in our family fish tanks, and I don't know it was something magic that fascinated me"*. Additionally, Alberto said *"I have always been attracted by the underwater world since that I am little...the sea environment is not new"*.

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#### 5.2.2 ANOTHER WORLD

The love of the marine life and the sea are important motivators for divers to practice the sport, but there is also another motivation as to why they liked to be involved in diving. For most divers, the water environment was not something new, but they still saw it as another world, as Johan explained, *"I like to be in a strange habitat"*, and also for Heinz, it was something different from what people are used to: *"For me personally, it is definitely another world: No traffic, no rush, no stress, no noise, no bad things"*. Likewise, Elizabeth saw it as another place: *"it is another world...You cannot image it, even with television, I have to go underwater and see and feel everything"*. The divers mainly saw the underwater world as a different space due to the quietness, the gravity, and the peacefulness, which enabled them to release pressure, relax, or clear their minds. Claudia explained

she used *“diving holidays very often if I think I have something to clear up, to go through or if I feel there is something but I can’t touch it”*. For Bert, diving was something that allowed him to go to another world:

*To get rid of this pressure and stress, I like to dive because it is really the moment. Nobody is calling me, nobody is emailing me, and I am just connected to the nature, and of course, if you go into a very unconscious physiological considerations, you could say that I am back in womb of my mother.*

Johan also recognized this similar sensation whenever he escaped to the underwater world: *“I do think it is like being in the mother womb...it is a feeling of being protective and safe”*.

For Heinz, the quietness in the underwater world triggered him to clear his mind: *“It gives me personal peace...Reduce the life to the central things, be one with yourself”*. Janneke described how it felt to be in ‘the other world’: *“You don’t hear anything except your own bubbles, your own breathing, everything goes really slow”* (translated from Dutch). Also, Claudia agreed that entering the underwater world *“is something relaxing”*.

Thus, the divers were primarily interested in the dive experience of entering this ‘other world’ instead of trying to expand their knowledge about the marine life. This corresponds to the continuums of diving tourist from Garrod and Gössling (2008) and makes the divers at St. Eustatius ‘enjoyers’ instead of ‘learners’. Moreover, according to Garrod and Gössling (2008), the divers at St. Eustatius are also ‘mariners’ since they were primarily interested in the experience (of entering this ‘other world’) instead of ‘socialisers’ for whom social interaction is of great importance.

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#### 5.2.3 EMOTIONS RELATED TO BEING IN ANOTHER WORLD

The emotions related to diving are closely related to the feeling that divers had when they were in ‘another world’. Thus, the quietness, gravity, and peacefulness that divers experienced while they were in the ‘other world’ are also closely related to the emotions involved while diving.

The overall emotion or feeling divers experienced was positive; like Heinz said, *“For me diving and being underwater means a good feeling, a positive good feeling”*. Bert could not express a single emotion for how it was to enter the underwater world: *“You can call it joy, happiness, I don’t know, it is amazement I would say”* Lisa agreed by explaining that entering the ‘other world’ *“is always really awesome”* (translated from Dutch). When Brenda entered the underwater world, it helped her to escape from the normal world:



*For us, it is just calm and peaceful. You forget about the rest of the world. You just think about not even breathing anymore, just the fish and the corals and what is happening around you. It is a way to relax.*

Of course, there are also differences in the emotions related to the practice of diving. For example, the emotions fear and anxiety, which result in adrenaline, are sometimes related to the sport, but in other cases, they are not associated with diving. For many divers, anxiety or fear was not related to diving, but for less experienced divers fear could play a role. Eveline mentioned that *“When you read the PADI book, you see all the stuff that can go wrong when you are in the water, and it sounds like there is a lot of stuff that can go wrong”* (translated from Dutch). However, Bert also related the time that he started diving and his emotions toward the practice were different: *“When I was inexperienced and a beginner yes, at that time adrenaline would play a role”*. For beginner Alberto, *“a feeling of being insecure”* also played a role, while Linda, who was also quite new to the sport, was *“very conscious”* of the surrounding environment.

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#### 5.2.4 ROLE OF DIVING IN EVERYDAY LIFE

For most divers at St. Eustatius, the practice of diving was a holiday activity. Diving is not something the divers at St. Eustatius normally perform at their places of residence. Although it was ‘only’ a holiday activity, for most practitioners, diving was a central part of their holidays. It was something they did multiple times per day everyday of their holidays. Thus, escaping to this ‘other world’ was significant during their stays at the island. An example is Heinz, who explained that *“diving is a very central part for me during the vacation...So if there is not a good diving place, I wouldn’t go on vacation to that place”*. Although many divers at St. Eustatius were not active in the practice of diving during their everyday lives, it was something they planned for: *“Yes, I plan it each year. I try to go at least once a year for diving holidays.”* like Claudia told. Most practitioners tried to go on a diving holiday a minimum of once per year, and they saw it as something to look forward to, as Lisa and Eveline mentioned: *“It is the first thing that I put in my suitcase: the mask and the fins”* (translated from Dutch). There are multiple reasons why diving, for many practitioners at St. Eustatius, was not part of their daily lives. Some practitioners did not have the choice to incorporate diving into their daily lives because it was not possible in the environment where they lived. That was the case with Danny and Tiffany, who said, *“we do not live in an area where this could be part of our everyday life”*. For others, the practice of diving would be possible to incorporate into their daily lives, but it was something that was not attractive to them. Bert explained: *“I am living on a lake, the biggest lake in Switzerland. I did one dive in the lake, and it was not interesting at all...For me, diving is being in a warm place with tropics and with colours, with fish, with seeing everything”*. However, for a few interviewees, diving played a central role in their everyday lives. For Alain and Adrienne, diving

helped them to relax: *"After a dive, I am very calm, so most of the time I am not thinking about the problems from work...You just forget about your problems"*. In addition, for Max, diving was something that helped him to relax in his daily life. For him, it was extremely important: *"If I have the chance to dive, I look at the possibilities to cancel my obligations"* (translated from Dutch). Even when diving was not practiced in the daily lives of the practitioners, it could play a role in their lives. A good example is Bert for whom the memories of diving helped him relax, made him happy, or even helped him sleep:

*I close my eyes. I see the view from the bungalow at Statia Lodge, the view of the sea. I see the boats. I see me putting on my equipment, going underwater and I fall in sleep like I swim into the depth.*

Overall, for the most practitioners on St. Eustatius, diving was a holiday activity, but this activity was not combined with many other activities; it was the main part of their vacations. For most practitioners, diving was not a central part of their lifestyles. Most planned to do it at least once per year, and only a few performed the activity in their everyday lives. This makes most practitioners at St. Eustatius 'Dabblers' instead of 'Fanatics' since, for most divers, diving was not an everyday activity (Garrod & Gössling, 2008). Additionally, the divers at St. Eustatius were 'remoties' instead of 'homies', according to the continuums of diving tourist from Garrod and Gössling (2008). Most divers, only dived abroad not at home.

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#### 5.2.5 DO IT TOGETHER

Diving should be always practiced together, according to the buddy system. For some partners, the fact that they should do the sport together is an important motivation. Danny explained that he and Tiffany *"like to do it together. So it is a sport that we like to enjoy together...it enables us to share it, and it is part of our relationship...Because, of course, we are buddies in life too"*. It is also seen as an activity that divers can learn together, as was the case with Jeffrey and Brenda: *"I think that we were looking for something we could do together...Something we are equally good at, equally bad"*.

According to the continuums of diving tourist, from Garrod and Gössling (2008), the divers at St. Eustatius are 'group divers' instead of 'independents'. However, they are forced to be 'group divers' due to the STENAPA regulations. The divers are 'group divers' since they dive in organised groups instead of only with a buddy.

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#### 5.2.6 TO CONCLUDE: MEANING

The divers had a deep connection with the sea and the marine life. Most of them were in contact with the elements of the sea before they started diving. However, the sea and its surroundings was

still something magic to them; it gave them the feeling of being in another world. Thus, the sea and the life underwater was an important motivator to dive, but a deep underlying cause of the motivation to dive was the feeling of being in another world. Entering this other world helped the divers to relax, to release stress, and to rid themselves of pressures. The emotions related to the practice were also strongly related to the feeling of being in another world. For all the practitioners, being in this other world was related to a positive feeling, which could be expressed as joy, happiness, and peacefulness. For some, anxiety and fear were also related to the sport, while for others, there was no place for these emotions while diving. Most of this was related to the level of the diver's experience, which provides strong evidence that the elements of the practice are connected and that they shape each other (Pantzar, Shove, & Watson, 2010). For most practitioners, diving did not play a role in their everyday lives because it was not possible in the place where they lived. However, some also saw diving as an activity they were only able to perform at a tropical destination. It was an activity that allowed them to enjoy the sea and the marine life but, at the same time, enter this other world so they could forget about normal life. However, a few divers incorporated the practice into their daily lives because they also wanted the enjoyment of the marine life and the feeling of escaping to another world incorporated into their normal lives.

### 5.3 COMPETENCE

With the practice of diving, the knowledge of the practitioners is of key importance to be able to perform the sport safely. Training is an important aspect in the creation of knowledge, but the competence of the practitioners does not only depend on training. It depends on multiple aspects, such as the frequency of diving, years of experience, and the different dive environments. First, the level of practitioners' certifications will be discussed, followed by the other aspects that influence the overall competence of the diver.

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#### 5.3.1 LEVEL OF SKILL

Almost all the interviewed divers at St. Eustatius had at least an Advanced Open Water Certification. Just a couple of them had only the Open Water Certification, but some of them were still beginners, such as Alberto and Linda, and others just started diving again after a long break, such as Claude and François. However, sometimes people did not see the added value of obtaining more certifications. Heinz mentioned that he had no interest in more certifications:

*I am a bloody tourist diver. I want to have fun and automatically you get more trained if you do more dives, but I am not that guy who takes special courses like Rescue Diver or Advanced or anything else, no.*

Kees and Janneke also did not feel the need to obtain more certifications, but they felt obligated after a while because they were not able to dive with people of their own experience: *“When you don’t have the Advanced Certification, you notice that you have to join the less experienced groups because most people get their Advanced Certification quite fast after their Open Water Certification”* (translated from Dutch). However, others, like Lisa and Eveline, saw the added value of the Advanced Open Water Certification because *“With the Advanced, you are able to go to the wrecks, night dives, and deep dives. Before you were not able to do that”* (translated from Dutch).

Most of the divers had their Nitrox Certifications for two main reasons. One was mentioned by Brenda, *“so we don’t get so tired”* and the other one by Lisa, *“with Nitrox, you can stay longer underwater”* (translated from Dutch). Although most of the divers used Nitrox, some were not a fan of it, like Heinz: *“Air is more natural and Nitrox is something more or less artificial for your body”*. However, overall, most divers at St. Eustatius had at least an Advanced Open Water Certification and a Nitrox Certification. Some continued to educate themselves with more certifications, such as the Rescue Diver and the Dive Master. Many of them did this because they believed it was important to develop themselves, like Johan mentioned, *“I think it is important to have good knowledge”*, and Max, *“I don’t really see it as all kinds of certifications. I see it as continuing my education and finishing it”* (translated from Dutch). Other reasons to continue with training, for Alain and Adrienne, were to become more comfortable, *“I have done training until 55 meters just to feel very comfortable at 40”*, and for the safety aspect, *“to be sure that if my buddy has some problems and needs help from my side that I will be able to help him correctly”*. The practitioners of diving had different motivations to continue training or not continue with more training, but they were all firm believers that practicing diving made them better divers.

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#### 5.3.2 DIVE EXPERIENCE

The practitioners of diving at St. Eustatius believed that experience made them better divers. According to Heinz, experience helped him to develop: *“The experience comes automatically with every dive”*. The competence of the diver is strongly related to the meaning that diver links to the practice. When a diver has more experience, it will benefit the overall experience of a dive because, according to the interviewees, a diver has more freedom, is able to enjoy more, and is more comfortable in the water. With more experience, it is easier to enter this other world since the diver does not have to think about the skills needed while diving. François gave an example of how

experience helps with breathing: *"Breathing is a sort of thing that you just learn while doing it. You learn how to breathe more calm"*. In addition, Bert had seen development due to practice, *"technically I have gotten better"*, but there was more: *"I think I am diving in a more respectful way for the nature because since I control my buoyancy very well now I don't touch anything with my legs or fins"*. For many divers, buoyancy is something that was hard to control but with experience became easier. Elizabeth mentioned, *"I don't have the problems anymore from the beginning with the buoyancy. Now it is natural"*. According to Adrienne, experience also enables a diver to see more during a dive: *"The first time you think about all the material and you hardly see things...You just focus on your equipment and that is it, and then the more and more you dive the more you see"*. Thus, the experience helps divers to relax, which enables them to have a feeling of being in another world and, at the same time, helps them to enjoy the marine life.

Although experience is of key importance to be a better diver, the places where the divers dive and the kinds of dives they do also influence the level of experience. Max said that the experience was a combination of the numbers of dives and the different kinds of dives. Also, Danny mentioned the same thing: *"So different environments and different types of dives so you learn some more skills"*.

In order to maintain those skills, all the interviewed practitioners dived at least once per year. Of course, they liked to maintain with these skills since the practice was something they enjoyed. Claudia believed that after a year of not diving divers need to become comfortable again: *"That is the problem if you dive only once a year on holidays"* It takes time to regain self-confidence and feel good: *"In the beginning I lose all my self-confidence...It takes three, four, or five dives before I feel really good again"*.

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#### 5.3.3 TO CONCLUDE: COMPETENCE

All the practitioners had different levels of certification. However, many divers had at least the Advanced Open Water Certification and the Nitrox Certification. With those two certificates, divers were able to join almost all the dives, and the Nitrox Certification enabled them to stay longer underwater. However, some of the divers underwent continuing education because they believed it was necessary to have good knowledge, to feel comfortable, and to train themselves. Still, in the end, all the divers agreed that practicing diving is what actually makes someone become a better diver. When practicing diving, the breathing becomes easier, the problems with buoyancy disappear, and the diver is able to enjoy more. Thus, being a more experienced diver makes it easier to enjoy the other world since the diver does not have to think about all the skills he or she must perform. In addition, it also enables divers to actually enjoy and see all the marine life underwater since they are solely focused on being in this underwater world.

According to the practitioners, it is also important to have experience with different types of environments and dives, which will enable a diver to practice skills in different surroundings. Most divers dived with a frequency of at least once per year. This again helped them to maintain their competence, and therefore, they were able to enjoy and experience the underwater world.

## 5.4 MATERIAL

Material is essential in order to perform the practice of diving. To investigate the element material, the first thing studied was the importance of equipment for the divers. Material does not only relate to the equipment necessary for diving, it also relates to material valuable for the practitioners of diving. An example is the underwater camera because, for many practitioners, it belongs to the standard diving equipment. Therefore, the meaning of underwater cameras for divers will be explored. Material also relates to the type of environment practitioners like to dive in because many times this can be related to certain material underwater. The same counts for the 'type' of diving that the divers favour.

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### 5.4.1 OWN EQUIPMENT VERSUS RENTED EQUIPMENT

Most of the interviewed practitioners at St. Eustatius were equipped with their own material for diving. The most important motivation to have personal equipment is safety; for many divers, it is important to trust the equipment and feel protected by it. In order to create this feeling of safety, practitioners buy their own equipment because, like Danny mentioned, *"we know we take care of our stuff"*. Johan also mentioned the important role equipment plays in the practice of diving: *"I think it is important as a diver to have your own stuff and your own regulator because your life is attached to your regulator"*. The safety aspect is also related to knowing your equipment and being comfortable with it. Furthermore, it is not that Jan did not trust the rented equipment but *"If you rent, you have everything but every time another, and in the case of an emergency, it may be good to know where everything is so you find it quickly"*. Kees and Janneke trusted the dive shops with their equipment, but they still had their own due to the hygiene aspect. They believed that the equipment was something personal. For many divers, being comfortable with their own equipment was not only related to knowing where to find everything but also to how the equipment fits. When they have their own equipment, they are sure of a proper fitting. Linda who did not have her own equipment could imagine that an advantage of having your own equipment is that it fits properly: *"If everything fits well than you don't have to worry about it"* (translated from Dutch).

There was a close relationship between the material and competence. When the divers had their own materials, it gave them a feeling of safety, but it was also important they have experience with diving, and thus with the equipment. When this was the case, divers were able to enjoy the experience more instead of worrying about other things. They did not feel stressed, and they were able to enter ‘the other world’.

The few practitioners that did not have their own equipment were all relatively new to the sport or just started diving in St. Eustatius. They all indicated that they felt comfortable with the rented equipment. The reason that they did not have their own equipment most of the time was due to the frequency they dived, like Brenda and Jeffrey mentioned. Due to Lisa and Eveline’s dive frequency, it was also more expensive financially to buy equipment because they did not see themselves as fanatic divers. Practitioners who had their own equipment felt that it was financially cheaper, and Johan thought that the equipment was not expensive. Claudia mentioned that *“if you stay at diving, it is really cheaper”*.

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#### 5.4.2 UNDERWATER PHOTOGRAPHING

For many divers, underwater cameras were seen as a part of their equipment. Taking a camera with them for a dive was part of the routine they fulfilled before diving. Thus, for many divers, an underwater camera can be seen as an important element of their equipment. Most practitioners who took photos underwater did this for two main reasons: To share the experience and to keep the experience for their own memories. It is important to mention that for divers the only way to share this experience is by showing pictures and by talking about it. Moreover, for many divers, it was also a way to keep the experience for themselves. When talking about experiences, it was not only the image of the beautiful landscape that they enjoyed, it was also the feeling they had while they were underwater.

Alberto took photos in order to share his experience underwater: *“So I like them to see what I am doing and to make them also participate in my experience somehow, to share this nice moment with the people that are important for me”*. Some practitioners that used a camera underwater specifically wanted to share the experience because many people did not dive. Elizabeth said that she did it *“for my relatives. Nobody dives in my family so they are always happy when I show them a picture”*. However, Elizabeth did not only take the pictures for her relatives. She also took them for her own memory: *“To remember, so I can see the picture in the winter evenings”*. Brenda and Jeffrey also wanted to capture the moments underwater because they believed that *“taking a picture is easier and better than my memory”*. However, not everyone agreed, especially not the practitioners that did not use cameras underwater, like Bert. He believed that *“the mind is the best hard disk you*

ever find”, and there was also another benefit for him: *“You don’t need a computer to look at them. You do not need electricity. It is a natural process”*. Around half of the interviewed practitioners did not use a camera underwater because some believed, like Heinz, that it could interfere with the dive: *“It may disturb me in my relax-ness because then you are focused if the picture is good or not”*. Thus, some divers did not want to use a camera because it would reduce the enjoyment of the underwater life and the feeling they had while they were in ‘another world’.

Taking pictures underwater is a totally different skill than photographing above water. For some, learning this new skill was an extra motivation to start taking pictures underwater; for others, the difficulty of taking pictures underwater restrained them from learning this skill. For Danny, it was an exciting skill to learn: *“It is a whole different skill than photographing above water. Understanding that and how to perfect that is so exciting”*. Heinz did not feel like it was an exciting skill to learn but believed it was rather difficult: *“I guess that only 5% of the pictures are good or visible”*. Kees agreed with that by saying that photographing underwater was kind of a hassle, and if a diver wanted to take good pictures, he or she needed much patience and a lot of light. In addition, Max believed that it was a difficult skill, and he would rather let other talented people do it: *“There are millions of photographers who can take better pictures than me”* (translated from Dutch).

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#### 5.4.3 LOGBOOK

A material that all the divers used after a dive was a logbook. In this logbook, divers maintain their own competence. The logbook can differ in details because it depends on the practitioner how elaborate he or she wants to be. During the interviews, the dive log was often an item that would be present on a table as reference for the divers. Whenever the element material was discussed, the diver used the logbook as a remembrance of the equipment used during the dives. However, the logbook also helped when talking about the elements competence. The logbook reminded the divers about the way that they felt during certain dives, the training they had and how they experienced it, the places they had been, and the marine life they had seen. In both of the dive centers there were special books of the marine life in St. Eustatius, which were used frequently after a dive. Usually, the dive center ‘helped’ practitioners to remember what kind of sea life they had seen, and they would show a picture of that animal in one of the books. Filling in the logbook would be seen as the last part of a dive and, at the same time, a social moment to talk about the dive.

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#### 5.4.4 DIVE ENVIRONMENT

The element material also includes the dive environment. This includes not only the natural ‘material’ of the underwater world, such as the corals, fish, and reefs, but it also includes the material that is placed underwater by mankind. These human-made materials can consist of artificial



reefs, such as wrecks, reef balls, and anchors. Men created some of them in the last decades, but some have been at the bottom of the ocean for two or three centuries. The compositions of the materials form an important influencer for the attraction of fish; this again influences the overall experience of the diver. For the practitioners at St. Eustatius, the variety of the dive environment is important, like Adrienne said, *“I like different dives. I am not interested in doing the same diving. It would be boring”*, or like Jeffrey explained, *“So usually we go for a week, and we typically want to have different kind of dives in that week. Not a repetition of what we have already seen”*. In addition to the overall experience the divers have in ‘the other world’, the marine life is also of significant importance, although some divers are more interested in large animals, other in small, and some like both. However, the setting in which the marine life is seen is also of high importance, as Alberto explained: *“The corals play a fundamental part. It makes the animal interesting”*. Also, Tiffany emphasised the importance of the whole setting underwater:

*You know when we were doing tiger shark diving in May, we would sit in the sand and watch the sharks. I mean it was thrilling to see these big animals, but you can’t compare it to a reef where there is so much to see.*

Janneke and Kees started to notice the importance of corals. When they dove at places where there was no coral or at places where the coral had died, they did not find it attractive, and *“it was not pretty”* (translated from Dutch).

St. Eustatius is a diving spot with many artificial wrecks and old ship wrecks. The interviewed practitioners either loved them or hated them. Elizabeth was one of the divers who was fond of the wrecks: *“It is a good place to see the animals and the corals...I am excited by the fact that this thing shouldn’t be there underwater”*. Linda was fascinated by the wrecks as well: *“Something that is made by people which is taken over by nature”* However, for a few others, a wreck was only *“a piece of waste metal put in the water”*, like Heinz mentioned.

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#### 5.4.5 TO CONCLUDE: MATERIAL

The element material shows again that the different elements connect with and form each other (Pantzar, Shove, & Watson, 2010). For example, some practitioners had their own equipment and some rented their equipment. The ones with the rented equipment were, on average, not the most experienced divers, and their dive frequency was also lower, which made renting equipment cheaper. However, most practitioners had their own equipment for a feeling of safety, comfort, and trust in the equipment. This again enabled them to truly experience ‘the other world’ without any distraction since they had their own equipment, and they had the skills to carry out the practice.

For around half the divers, underwater cameras were part of the equipment that enabled them to share the experience and save it for their own memories. Again, underwater photography is closely related to the competence of a diver since this is a real skill; some divers wanted to develop themselves and wanted to learn this skill. Other practitioners did not want this and only saw it as a distraction from the experience underwater; the meaning that they related to the practice would be changed by that distraction. For the divers, a logbook was the piece of material related to the end of a dive. Logbooks helped the divers to remember the materials involved in a dive, the meaning related to a dive, and the competences they needed while diving.

For the divers, it was important to be able to conduct different kinds of dives at a dive location in order to make diving interesting. Although there are many wrecks at St. Eustatius, not everyone was fond of them. Half of the divers loved them the other divers hated them. Of course, the marine life was important for all the practitioners but the 'background' of the sea life, the corals and the reefs, was also significant to the divers.

## 5.5 PRODUCERS OF THE PRACTICE

### 5.5.1 STENAPA AND DIVE CENTERS

In St. Eustatius, the most important producers of the practice are the dive centers, STENAPA, and the St. Eustatius Tourism Development Foundation. They are important stakeholders that influence the practice of diving. Without the dive centers it would be impossible to perform the practice since this is prohibited without being accompanied by the dive centers. These rules were created by STENAPA in order to protect the marine life and to control activity. Thus, all the practitioners had to dive with one of the dive centers, and the centers, therefore, influenced the practice for the practitioners. The divers did not feel annoyed by the fact that they had to dive with one of the dive centers. Rather, they saw it as something nice since all the divers were all fond of the dive centers. Alain and Adrienne explained that for them the diver center *"is like family you see. You feel you are welcome...We are not feeling like just a number but like family"*. Additionally, for many divers, it was a pro that both of the dive centers dived in small groups. As Claudia mentioned, *"I really enjoy the small groups"* The divers liked to be in small groups because large dive groups could be confusing underwater since it was hard to remember who belongs to a particular group. Furthermore, the larger groups made it more 'crowded' underwater, and for many practitioners, this meant that there was also more stress involved in the practice, like Claudia explained: *"When it is too busy, there is more stress"*. Moreover, the small groups made it, according to Tiffany, *"very personal"* which

enabled people to interact and connect with each other and with the dive instructors. In addition, the practitioners appreciated that the dive centers were able to communicate in different languages. Eveline thought it was *“nice when people can explain something in your own language”*. Due to the dive centers the practitioners felt comfortable in the water, since there was no stress due to the small groups, and out of the water, due to the personal multilingual environment. Thus, the dive centers contributed to the practice of diving. They helped to create nice circumstances, which enabled practitioners to enter this ‘other world’.

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#### 5.5.2 ST. EUSTATIUS TOURISM DEVELOPMENT FOUNDATION

The dive centers were not the only ones responsible for creating nice circumstances for the divers. The whole setting of the island facilitates a diver going to this ‘other world’. Therefore, it is important for the future to make decisions about tourism with consideration to the opinions of the divers. Claudia explained that a unique selling point of the island was definitely the diving since *“the underwater world is really impressing”*. However, it is not only the diving, it is the *“diving combined with the atmosphere at the island”* according to Claudia. Jan explained that he thought that the island was attractive for divers due to the lack of mass tourism. He believed that divers came to the island to relax. The fact that there is no mass tourism on St. Eustatius was something that more divers found attractive, like Linda who felt that St. Eustatius was unspoiled since there was no mass tourism. This enabled divers to *“have a Caribbean feeling”* like Johan explains. Most divers even admitted if tourism was developed with chain hotels and mass tourism that they would not come back to the island. The easiness, quietness, and the small size of the island made it attractive for the divers. The producers of the practice on St. Eustatius contributed and could influence the divers’ experiences on the island and in the underwater world. The practice’s producers were facilitators that enabled the divers to enter this ‘other world’ while diving. When the St. Eustatius Tourism Development Foundation wants to develop tourism on the island, this development can have consequences for the divers’ experiences.

#### BEACH AND CRUISE TOURISM

For the future, the St. Eustatius Tourism Development Foundation and the Commissioner of Tourism are interested in beach tourism (C. Lindo, personal communication, 3 October, 2014; C. Tearr, personal communication, 13 October, 2014). Currently, the only beach that exists at St. Eustatius consists of a couple of meters of black volcano sand. The St. Eustatius Tourism Development Foundation feels like it is restricted in its possibilities for tourism due to the lack of a real beach: *“Whenever you don’t have a beach, you are limited in the activities that you can develop in this area”*, and they believe having a beach *“is necessary since people want to have a beach”* (C. Tearr, personal communication translated from Dutch, 13 October, 2014). However, all the divers that participated

in this research did not see the lack of a beach as something negative. Instead, the divers saw it as something positive: *"When there is no beach at all, the diving is normally much better"* as explained by Claude. Johan believed that creating a beach *"is a waste of money. It is a waste energy. It won't bring anything to the island"*. Additionally, he was happy with the volcano sand on the beach: *"I appreciate the absence of white sand because this prevents the tourists"*. Also, Max believed that St. Eustatius *"doesn't have to change the island. The divers that visits the island come here to dive"* (translated from Dutch), and Jeffrey mentioned, *"I think if you want to relax on the beach, there are probably better Caribbean islands for that"*.

The St. Eustatius Tourism Development Foundation and the Commissioner of Tourism were also interested in cruise tourism (C. Lindo, personal communication, 3 October, 2014; C. Tearr, personal communication, 13 October, 2014). According to them, cruise tourism would bring many tourists to island, which would be positive for the economy of the island (C. Lindo, personal communication, 3 October, 2014; C. Tearr, personal communication, 13 October, 2014). The divers were not fond of the idea of cruise tourism. For example, Alberto was not in favour of cruise tourism, *"I really try to avoid these places when I go on vacation"*, and Janneke believed that *"the island doesn't have the infrastructure for cruise tourism"*. All the participants of this research liked St. Eustatius's quietness and lack of mass tourism. The participants saw it as a unique selling point that there were not many tourists at the island, like Tiffany explained: *"I don't want too many people coming to the island...I like thinking that this is my secret"*. In addition, Claudia explained that she liked St. Eustatius so much because when she was on holiday she was *"looking for quiet places"*. For Elizabeth, more ships would be a distraction: *"There are already a lot of ships. We do not need cruise ships. It is a distraction"*.

#### EXPANDING TOURISM PRODUCT

The divers saw possibilities for expanding tourism through hiking or historical tourism. Kees believed that the history of St. Eustatius was a unique selling point: *"St. Eustatius doesn't promote historic tourism, although I believe they can use it as a unique selling point"*. In addition, Linda believed that hiking tourism would be possible on the island due to the *"nice nature"* (translated from Dutch) of St. Eustatius. However, many divers did not think that other forms of tourism were possible due to the lack of activities. Adrienne mentioned, *"There are not a lot of things to do. Just walking to the Quill is interesting, but it is a one day activity"*, and Claudia explained that she misses places *"where you just can sit, read a book or drink a coffee"*. In addition, Janneke believed that *"the island is not prepared for tourism"* (translated from Dutch).

The facilities that exists do not give tourists *"a sense of being welcome"* as explained by Alberto. The service at restaurants, bars, and hotels was moderate, according to the divers. However, the divers

did not blame the locals for this; as Bert mentioned, *“the fact that sometimes the service is not what it should be has nothing to do with the unwillingness of people or the unfriendliness. It is just that nobody ever told them”*. Linda felt like *“the locals need to acknowledge that tourism on the island is a great opportunity”* (translated from Dutch). However, the locals did not see tourism as a great opportunity. The tourism sector is an industry in which the locals did not prefer to work. The St. Eustatius Tourism Development Foundation and the Commissioner of tourism were aware of this problem. The Commissioner of Tourism admitted that currently, *“The locals do not want to participate in tourism”* (C. Tearr, personal communication translated from Dutch, 13 October, 2014).

The lack of activities and facilities had a huge influence on the revenue of tourism for St. Eustatius. Due to the absence of activities and facilities, tourists were not able to spend their money. Johan even mentioned, *“you know if you are in the mood to spend money, you don’t really have the chance too”*. Another consequence of the absence of activities is that divers would not recommend the island to non-divers, while they would recommend the island to divers. The divers would not recommend the island to non-divers because *“Flying here is quite expensive, so you have to be able to offer something in return for that. I am not sure if just the tourism above ground can facilitate that”*, like Jeffrey explained. Also, Max would not recommend the island to a non-diver either: *“I think most of my non-diver friends will get bored here”* (translated from Dutch).

Both dive centers believed that extra facilities are necessary for the island, but one of the dive centers did not believe that the divers would participate in other activities if there were more activities to participate in: *“I believe that you have to offer a diver something really special to make the person want to skip a dive”* (M. Harterink, personal communication translated from Dutch, 18 October, 2014). According to the dive center, this is due to the kind of divers that visit the island:

*You have two different kinds of divers. You have tourist with a dive certificate, and you have the fanatic diver. Everyone that comes to this island dives two or three times per day, seven days in a row. They do not visit the Quill. They dive every day because it is their passion. The tourist with a dive certificate does not visit this island...They have to pay the double amount for an island that does not have the same facilities as other Caribbean islands. They visit Curacao. There you have nice food and really nice hotels for half of the price.* (M. Harterink, personal communication translated from Dutch, 18 October, 2014)

For the St. Eustatius Tourism Foundation, it is also a possibility to expand the current diving industry. The divers that participated in this research would not mind if this were to happen in the future because they did not believe this would disturb the quietness and tranquillity. Only a few divers visit the island every year, and none of the participants believed more dive tourists would be a problem.

Max would not find it a problem since the dive sites are not located close to each other, and François believed *“there are enough dive places, so there is room for more divers”*.



## 6. Quantitative Results



*Scubaqua & Dive Statia ©*

This chapter is the result of the questionnaires, which were conducted in a 10-week period on St. Eustatius. In total 78 questionnaires were conducted with individuals who travelled from their usual place of residence to St. Eustatius, and who were actively involved in diving activities.

The questionnaire meant to give insight into the socio-economic profile of the respondents. The qualitative results together with the quantitative results helped to create a better understanding of diving as a social practice.

This chapter starts with the demographic data of the divers; paragraph 6.2 is about St. Eustatius, paragraph 6.3 is about diving on St. Eustatius, and as last paragraph 6.4 is about diving in general. All the percentages and frequencies are rounded, thus there are no decimals except for in the figures. All the percentages and frequencies below .49 are rounded downwards and all the frequencies above 0.5 are rounded up.

## 6.1 DEMOGRAPHIC DATA

The demographic data helps to create a complete profile of the divers on St. Eustatius. The demographic data contained questions about gender, age, nationality, level of education, and level of income. There are no missing values, although some of the participants checked the answer option 'prefer not to say'. A total of 78 participants filled in the questionnaires, out of those 78 participants, 37% were female and 63% were male. Research among divers who obtained PADI diving certificates showed that in 2013, 65% of the divers were male and 35% of the divers were female (PADI, 2014). The data from this research corresponds quite well with the data from PADI, which means that the diving practice is still a bit dominated by men. This can be explained by the image of scuba diving, which is sometimes related with danger. However, the image is transforming in a way that more female divers participate (Musa, Kadir, & Lee, 2006).

Almost 80% of all the questionnaires were completed by participants who dived at the dive center Scubaqua & Dive Statia, 12% was completed by divers from Golden Rock Dive Center, and the remaining 4% was from STENAPA. Those 4% dived with STENAPA due to an internship for the organisation. These results correspond with the estimation of Scubaqua & Dive Statia that they control approximately 80% of the dive industry on St. Eustatius (I, Walther, personal communication, 1 December, 2014).



Only 5% of the participants are under the age of 24; most participants are in the age ranges of 25 to 34 years, 35 to 44 years, and the largest group of participants are in the age range of 45 to 54 years. The average age of the divers who obtained PADI diving certificates was 29 in 2013 (PADI, 2014). This differentiates quite a bit from the participants of this research since the largest group of participants is between the ages 45 to 54 years. This large difference can be explained with the research from Garrod and Gössling (2008) who assumed that people start to learn diving at an earlier age than when they participate in diving holidays.

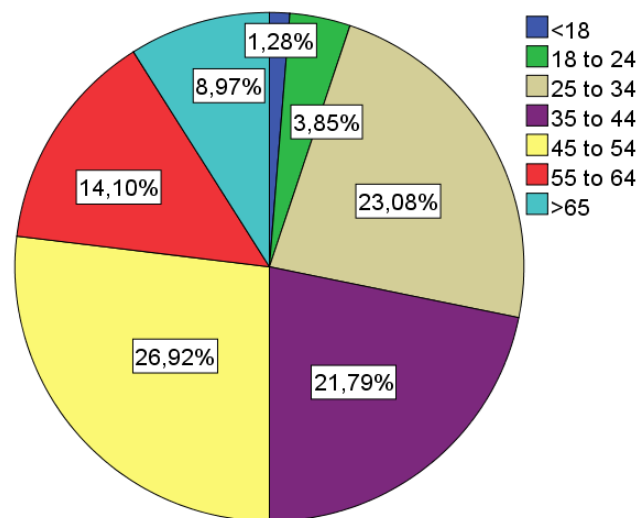


Figure 7. Age category of the participants (N=78)

Most respondents are from the Netherlands, United States or France; together these nationalities count for approximately 74% of the participants. It is not surprising that many participants are from the Netherlands since the island is a special municipality of the Netherlands. For the American participants the island is quite accessible since the travel time is not that long compared to the European guests. In addition, both of the dive centers focus their marketing on the American market by visiting dive shows in the United States. The many participants from France and Switzerland (the Swiss count for 10% of the participants) might seem a bit odd but this can be explained by the fact that two out of the four owners from Scubaqua & Dive Statia are from Switzerland. Since the owners of Scubaqua & Dive Statia started the dive center on St. Eustatius, they have been actively targeting the French and Swiss market. The dive center is also attractive for these markets since there are always instructors working who are able to speak French with them.

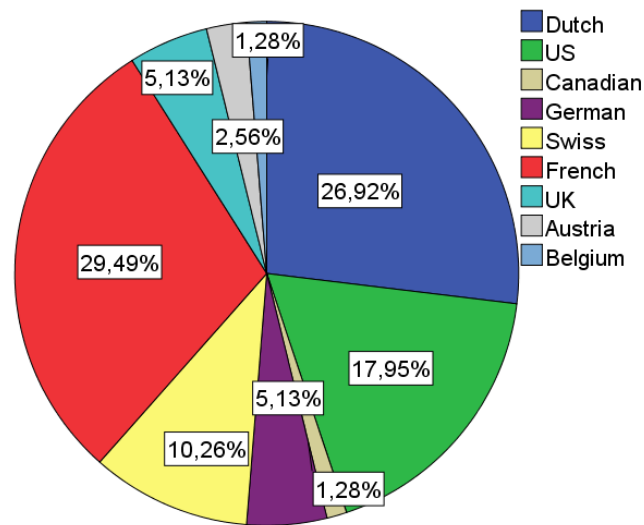


Figure 8. Nationalities of the participants (N=78)

Most participants have a high level of education. Almost 50% has a bachelor or a master degree. Two of the participants did not want to answer this question and checked the answer option 'prefer not to say'. Previous research from the WTO in 2001 also showed that the sport is dominated by well-educated people; this was related to a high income of the divers.

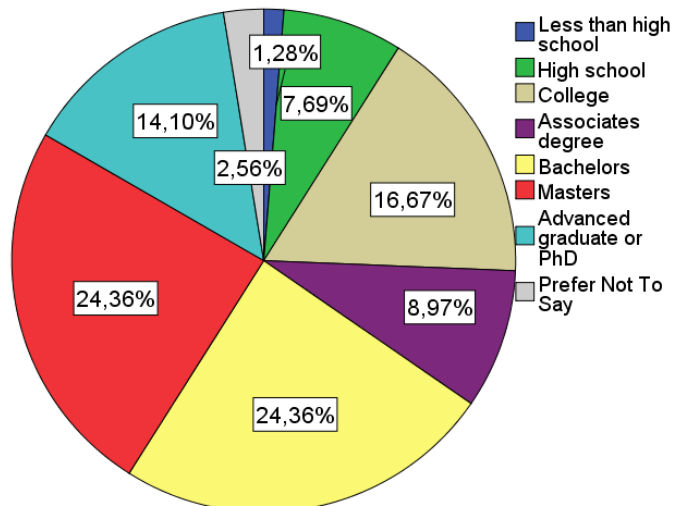


Figure 9. Level of education of the participants (N=78)

According to the WTO (2001) the average household income before taxes of a diver in the US was around \$80.000. The question about the yearly household income showed that 43% of the participants had an income over \$75.000 but also 37% had an income lower than \$75.000. However,

of the participants who had a yearly income lower than \$75.000 only 14% had an income below \$34.000. Several students (interns, researchers) who completed the questionnaire can explain the 14% of the participants with an income below \$34.000. In addition, almost 20% of the participants were on holiday without any company, this might indicate that their household income exists out of a single income, which can be lower than a multiple household income. Around 18% of the participants did not want to answer the question about the household income, and checked the answer option 'prefer not to say'.

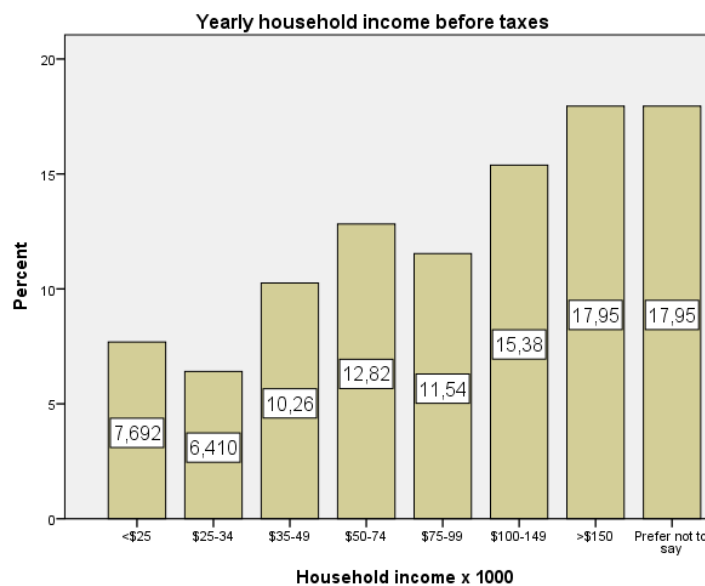


Figure 10. Household income per year before taxes of the participants (N=78)

## 6.2 ST. EUSTATIUS

The section about St. Eustatius included questions about the travel motivations, travel companions, the duration of stay, the accommodation, and the activities the participants were involved in on St. Eustatius. For almost 65% of the participants this was the first time to visit St. Eustatius, 35% of the participants already visited the island before. Of those 35% of the participants, 18% visited the island for one to five times before. Some of the participants visited the island for more than six times before. For most of the repeat visitors, their main reason to visit St. Eustatius is diving, but the diving in combination with the atmosphere on the island is what brings them back to the island. Only one out of the ten people who have visited the island over six times before does this because of family on St. Eustatius.

The dive centers of St. Eustatius are aware that many divers visit the island several times. Scubaqua & Dive Statia believe that 60% of their guests are repeat visitors, Golden Rock Dive Center believes that around 30% to 40% of their guests are repeat visitors.

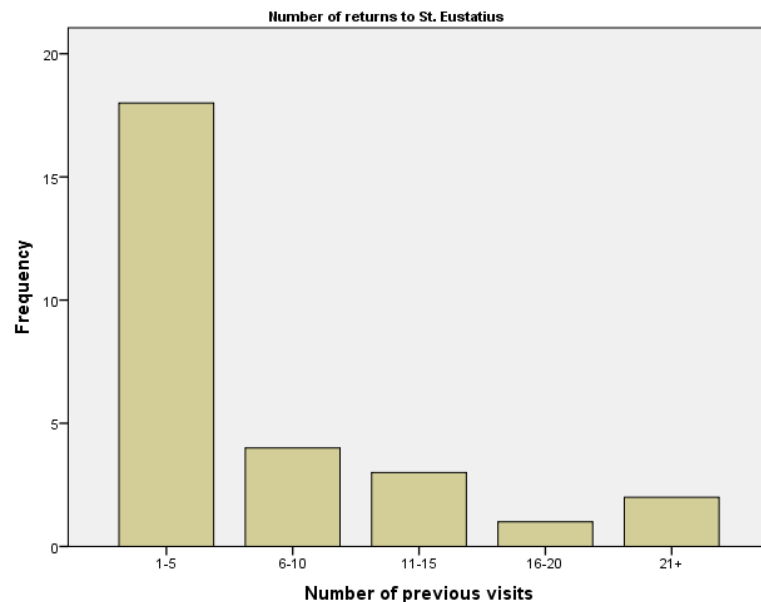


Figure 11. Number of returns to St. Eustatius (N=28)

Nearly 90% of the participants visited the island for leisure and 4% because of business. This is in contrast with the information of The Strategic Development Plan of St. Eustatius in which was mentioned that only a small amount of the tourist were leisure tourist (Hoogenboezem-Lanslots *et al*, 2010). However, many individuals who are for business purposes on the island are not involved in the practice of diving. Furthermore, most individuals who are on the island for leisure purposes are involved in diving since this is an important touristic attraction. The remaining 6% of the respondents were on the island because of an internship.

Most of the participants travelled with their friends (32%) or with their spouse (24%). In addition, many participants travelled with their family (22%) or alone (20%).

Over half of the participants (65%) did not combine their trip to St. Eustatius with other destinations in the Caribbean. The other 35% did combine their trip with other destinations. The most popular destination was St. Martin with 28%, explained by the direct flight connection between the islands, and the distance between the islands. The second most popular destination to visit together with St. Eustatius was Saba with 19%, again explained by the close distance between the islands, although there is no direct flight connection between the islands. Other destinations that were combined with

the visit on St. Eustatius, although in a lesser extent, were St. Kitts (12%), Nevis (12%), Curacao (10%), Bonaire (7%), and Anguilla (7%).

Cross tabulation between the variable 'first time or repeater on St. Eustatius' and the variable 'visits to other Caribbean islands' explained if a higher proportion of first time visitors or repeaters visited other Caribbean islands or not. The cross tabulation showed that from all the people who did not visit other Caribbean islands that for 73% of the participants it was the first time on St. Eustatius, and for 27% of the participants it was a repeat visit to St. Eustatius. The bar chart shows that the most participants for whom it was the first time to visit St. Eustatius did not combine their trip with other Caribbean islands. For the repeat visitors there is no difference between the number of participants who combine their trip with other Caribbean islands or not. The results are statistically significant since  $\chi^2=4.568$ ,  $df=1$ ;  $p<0.05$ . This means that there is a significant difference between the variable 'first time or repeater on St. Eustatius' and 'visits to other Caribbean islands'.

Table 3. Cross tabulation First visit to Statia \* Visits other Caribbean islands (N=78)

First visit to statia * Visits to other Caribbean islands				
		Visits to other Caribbean islands		Total
		1.00 Yes	2.00 No	
First visit to Statia	Count	13	37	50
	1.00 Yes			
	% within Islands Visit Caribbean Islands	48,1%	72,5%	64,1%
	% of Total	16,7%	47,4%	64,1%
	Count	14	14	28
	2.00 No			
Total	% within Islands Visit Caribbean Islands	51,9%	27,5%	35,9%
	% of Total	17,9%	17,9%	35,9%
	Count	27	51	78
	% within Islands Visit Caribbean Islands	100,0%	100,0%	100,0%
		34,6%	65,4%	100,0%

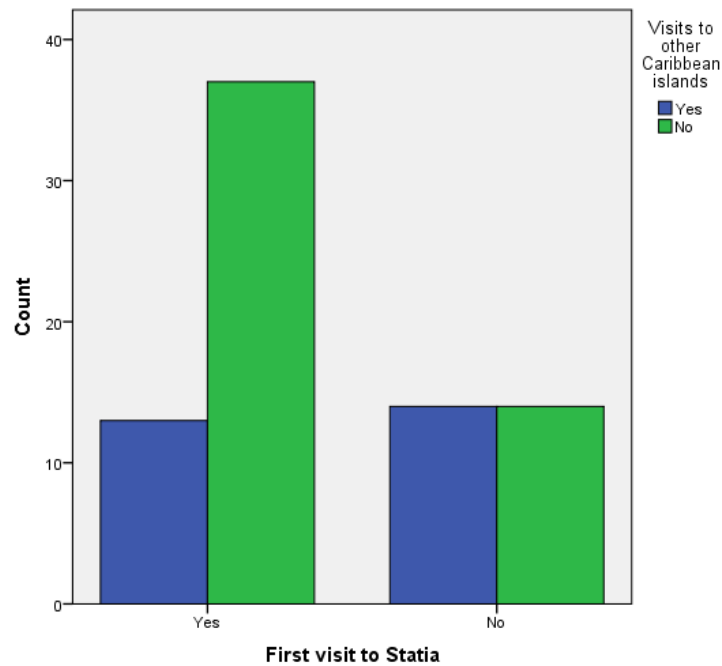


Figure 12. Bar chart cross tabulation First visit to Statia \* Visits other Caribbean islands (N=78)

Many of the respondents (30%) knew about St. Eustatius because they heard about it from friends and relatives. In addition, 23% of the participants knew about the island because of a travel agency. Some respondents (15%) knew about the island because of the Internet, another 15% knew about the island because they visited St. Eustatius before.

#### 6.2.1 AVERAGE STAY

The participants stayed for an average of 11 days on St. Eustatius, however this number is somewhat influenced by two participants who stayed for longer than a month on the island. Without these two, the average stay on the island is nine days. This is similar to the research from CBS in 2014, although in that case the CBS mentioned that the average stay of nine days was somewhat influenced by tourist who stayed on the island for a month or longer. However, the research of the CBS defined tourist as all the non-residents on the island. While this research involved *“individuals travelling from their usual place of residence to St. Eustatius who are at the island actively involved in one or more diving activities, such as snorkelling, scuba diving or diving with the use of rebreathing apparatus”* in the research. Thus, both studies used a different population. Therefore, it is possible to assume that the population of this research stays for an average of 9 days on the island.

During their visit on the island almost a quarter of the participants stayed at The Old Gin House and another quarter slept at Statia Lodge. From the remaining participants almost 20% stayed in the Golden Era Hotel. Also 23% of the participants indicated that they stayed in an ‘other’ type of

accommodation. These ‘other’ types of accommodations were yachts, houses facilitated by internship companies, and friends or/and family on the island.

#### 6.2.2 INVOLVEMENT IN ACTIVITIES

For 80% of the participants diving was the key activity during their stay at St. Eustatius, 23% of the participants even indicated that they were not involved in any other activities besides diving. According to the different segments of diving tourist from Garrod and Gössling (2008) the divers on St. Eustatius are ‘mainliners’ since the travel motivation for the most participants is primarily diving. However, 77% of the participants mentioned that they were also involved in other activities besides diving. The most popular activity to undertake was visiting historical monuments like Fort de Wind and Fort Oranje, 18% of the participants who indicated that they were involved in other activities besides diving indicated that they were involved in this activity. Another activity that was popular was hiking; almost 18% of the participants who participated in other activities besides diving were involved in this activity. Figure 12 shows the involvement of the participants in other activities besides diving.

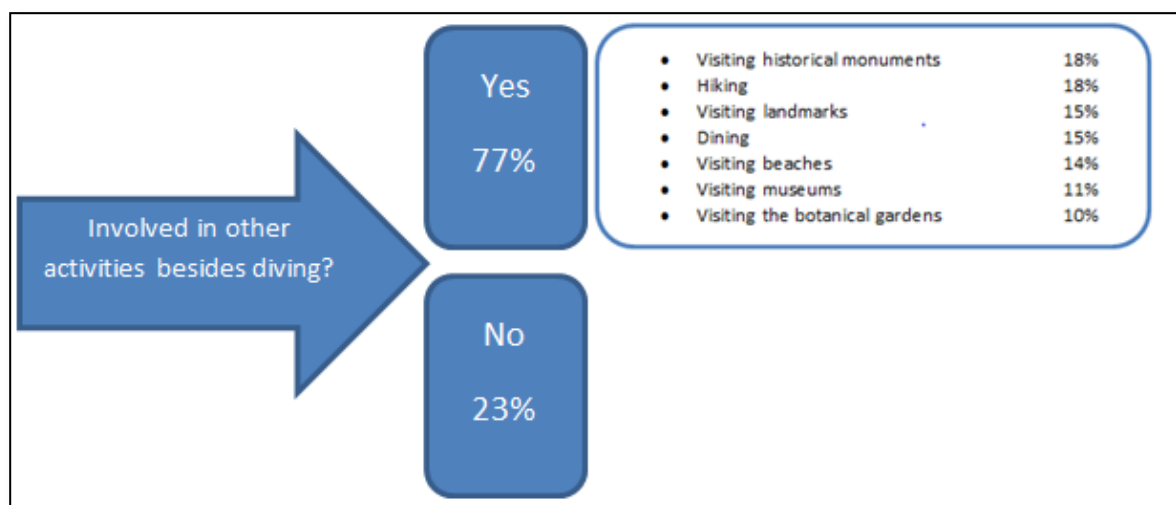


Figure 13. Involvement in activities besides diving (N=78)

Cross tabulation between the variable ‘first time or repeater on St. Eustatius’ and the variable ‘involved in other activities besides diving’ explained if a higher proportion of first time visitors or repeaters were involved in other activities besides diving or not. The cross tabulation showed that from all the participants who were involved in other activities besides diving 65% visited the island for the first time, and 35% was a repeat visitor. The bar chart also shows that the most participants who visit the island for the first time were involved in other activities besides diving. Nevertheless, most of the repeaters were also involved in other activities besides diving although in a lesser extent. Unfortunately, these results are not statistically significant since  $\chi^2=0.091$ ,  $df=1$ ;  $p>0.05$ . This means

that there is no significant different between the variable 'first time or repeater on St. Eustatius' and the variable 'involved in other activities besides diving'.

Table 4. Cross tabulation First visit to Statia \* Involved in other activities (N=78)

visits First visit Statia * activities Involved in other activities Crosstabulation				
		Involved in other activities		Total
		1.00 Yes	2.00 No	
First visit to Statia	Count	39	11	50
	1.00 Yes			
	% within activities Involved in other activities	65,0%	61,1%	64,1%
	% of Total	50,0%	14,1%	64,1%
	Count	21	7	28
	2.00 No			
Total	% within activities Involved in other activities	35,0%	38,9%	35,9%
	% of Total	26,9%	9,0%	35,9%
	Count	60	18	78
	% within activities Involved in other activities	100,0%	100,0%	100,0%
	% of Total	76,9%	23,1%	100,0%

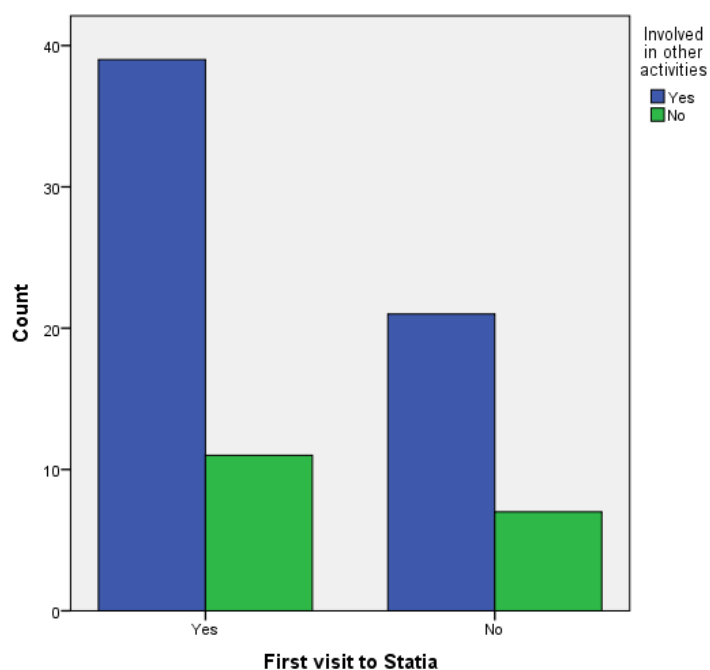


Figure 14. Bar chart cross tabulation First visit to Statia \* Involved in other activities (N=78)



### 6.2.3 AVERAGE SPENDING

The participants indicated their average daily spending on St. Eustatius (without accommodation and diving cost). Almost a third of the participants (29%) spent around \$40 to \$79 per day, 26% of the participants spent \$80 to \$119 per day, and 23% of the participants did not spent more than \$40 per day.

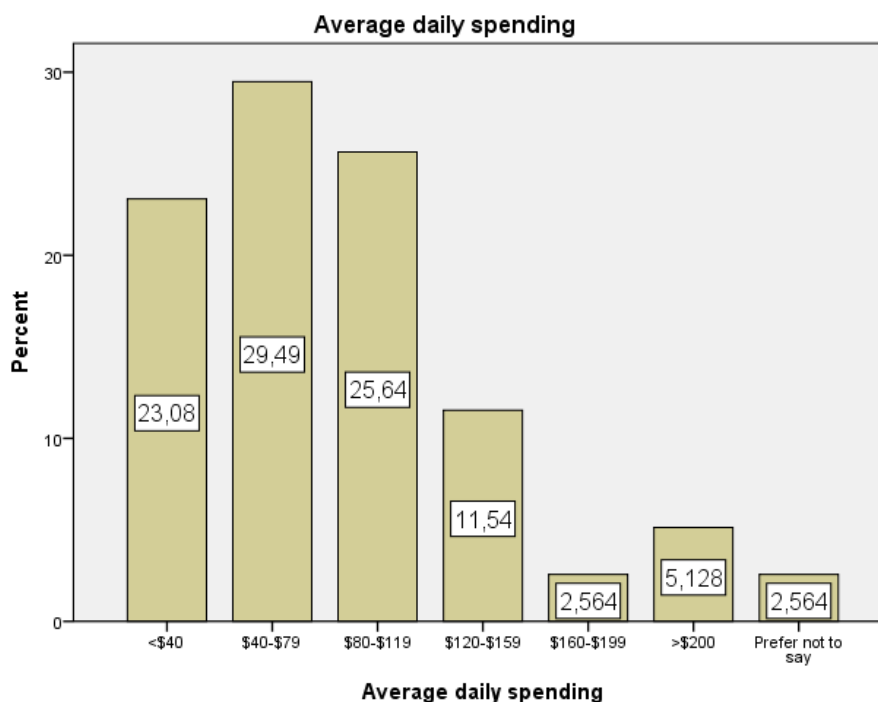


Figure 15. Average daily spending (N=78)

In order to calculate the average daily spending it is necessary to know the average amount of accommodation cost. The most participants stayed at The Old Gin House, Statia Lodge, or the Golden Era Hotel. On average, the participants spent around \$205 for a single room with ocean view, and \$215 for a double room with ocean view.

Table 5. Average rate of accommodation cost per night

	Single room with ocean view	Double room with ocean view
The Old Gin House	\$255.00	\$265.00
Statia Lodge	\$145.00	\$165.00
Golden Era Hotel	\$216.00	\$216.00
Average rate	\$205.00	\$215.00

For the diving, the participants paid approximately \$50 per dive. On average, the divers dived around 12 times during their stay on St. Eustatius. One person made 100 dives during his stay of 60 days. If this diver is not counted, the average number of dives is 11. Thus, on average the divers spent around \$550 for diving during their stay. This does not include the Marine Park fees from STENAPA that cost another \$30.

In addition, the dive center Scubaqua & Dive Statia has made calculations of the expenses of divers during their stay on the island. The calculations were made per diver for a one-week stay on the island.

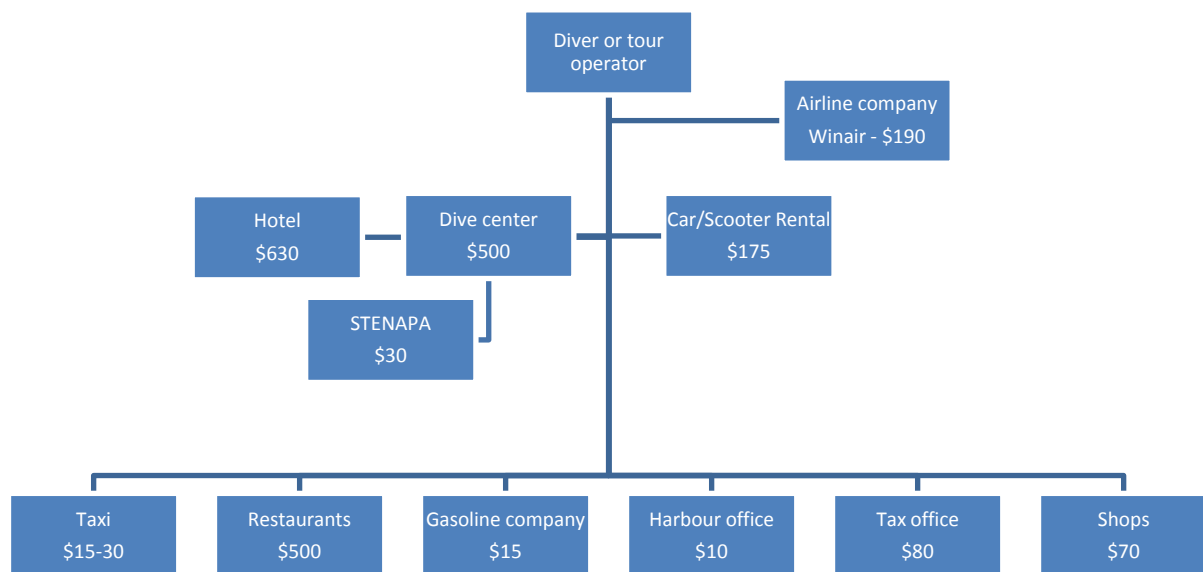


Figure 16. Average expenses per diver per week according Scubaqua & Dive Statia (I. Walther, personal communication, 1 December, 2014)

According to this calculation, divers pay approximately \$2.215 per week; this is without the international flight of the divers. This calculation seems accurate compared to the resulting data derived from the questionnaires. The average room rate might be a bit higher depending if the diver is travelling alone or with company. In addition, not all the divers rent a car or a scooter on the island. This would make the cost for car/scooter rental disappear but the taxi cost would probably be higher. The tax includes the departure tax of \$15 whenever tourists leave the island. Probably many divers do not have to pay the \$10 fee for the harbour office since they only use the boat of the dive center.

The calculations made by Scubaqua & Dive Statia seem quite realistic, although it is always questionable if some expenses need to be a bit higher, lower, or are not applicable at all. Overall, it

can be assumed that the divers spent on average \$2.000 to \$2.300 per week for their stay on St. Eustatius. This is without the international flight.

### 6.3 DIVING ST. EUSTATIUS

Another part of the questionnaire was about diving on St. Eustatius. In this part of the questionnaire questions were asked about the equipment, number of dives, and favourite dive sites on the island. One person did not answer the question about the equipment and the number of total dives.

Most participants have their own dive equipment (around 58%), almost 18% own some attributes of the dive equipment and rent the equipment that they do not own themselves; the other 25% of the respondent rented all their dive gear. However, it is important to mention that the participants who took their own diving equipment did not take their own weights or dive tanks since this would make the equipment too heavy to be able to carry it on an airplane. The most participants who have their own dive equipment use BCD's with integrated weight, which enables them to only use the weights of the dive centers instead of the weight belt.

As described before, the divers dived on average 11 times during their stay. The most participants stayed on average for nine days on the island, this would mean that the divers made on average 1.22 dives per day. However, due to the risks involved with diving before or after flying it is most of the time not possible for divers to dive on the first day or last day of their stay. Thus, the divers dived on average for 1.57 times per day.

With the help of a map of the dive sites the divers were asked to indicate their three most favourite dive sites on the island. In total 78% of the respondents completed this question. In order to get a good impression of the most favourite dive sites of the divers all the data for the most favourite dive site, the second most favourite dive site, and the third most favourite dive site were combined. The Charles Brown was selected as the most favourite dive site, followed up by Double Wreck, and by Chien Tong. Nevertheless, the dive site Grand Canyon almost received the same scores as the Chien Tong. Therefore, it is fair to say that the Charles Brown, Double Wreck, Chien Tong, and the Grand Canyon were the most favoured dive sites.

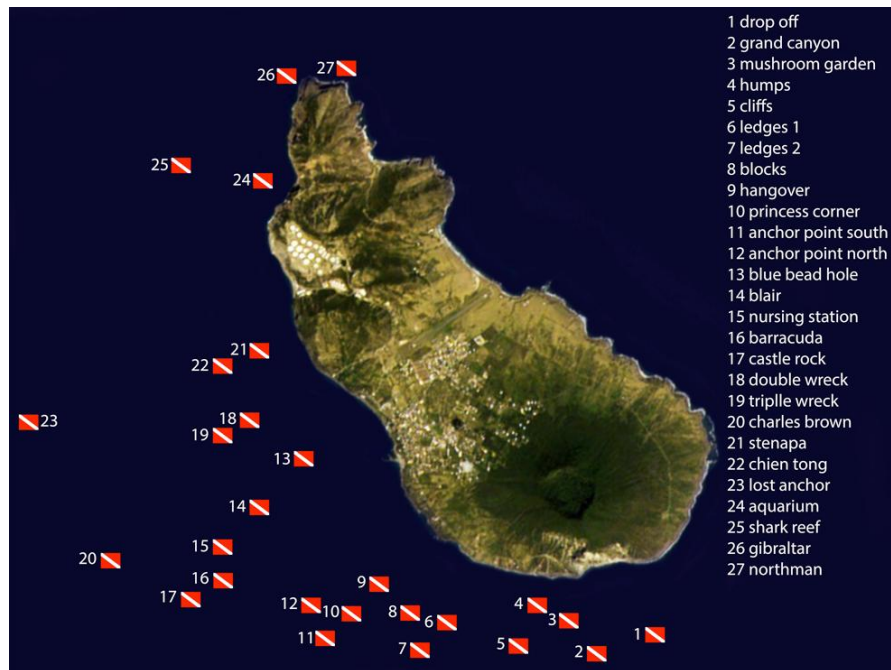


Figure 17. Dive sites St. Eustatius

It is quite striking that three out of the four favoured dive sites were wrecks. The Charles Brown and the Chien Tong are both artificial reefs, and Double Wreck is an old shipwreck from the 1700's. From the most favoured dive sites the Grand Canyon is the only one that is not a wreck but a deep dive between the 30 and 40 meter. This shows that many people favour the wrecks on St. Eustatius. The dive centers are aware that wrecks are favoured by divers, especially the Charles Brown. The dive centers believe that the Charles Brown is getting more famous in the diving world, they see this as something positive since it is good for the publicity of diving on the island (personal communication M. Hartenik, 18-11-2014). However, the qualitative research showed in contrast to the results of the quantitative research that some participants do not favour the wrecks but see it as a piece of waste in the water. Thus, the most favourite dive sites are quite surprising compared to the qualitative research. This can be explained with the help of the average dive site use per year (average of the years 2010 to 2013). The average dive site use shows that the most visited dive sites by the dive centers were the Chien Tong, Double Wreck, and Charles Brown. Thus, it is likely that the divers visited one of these dive sites during their stay compared to less visited dive sites by the dive centers. Hence, the most favourite dive sites of the divers are probably related to the dive sites that they visited with the dive centers. The results of the average dive site use per year show that the dive centers visited the dive sites with a wreck more often than the other dive sites. The average dive site use is shown in Figure 18.

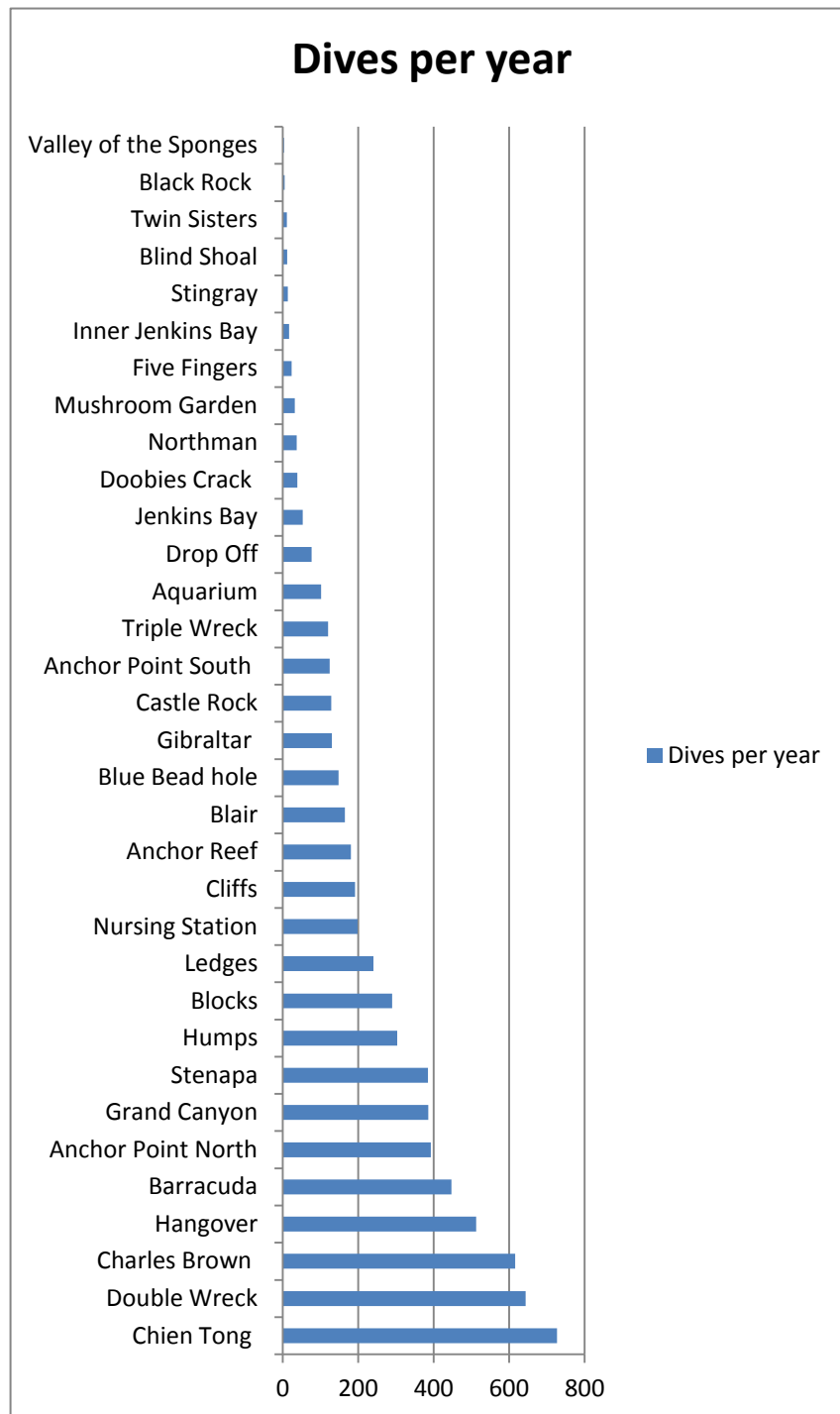


Figure 18. Dives site use per year (Average 2010-2013). This bar chart was created with the data from STENAPA.

#### 6.4 DIVING

A part of the questionnaire was mainly focused on the experience of the divers. This was in terms of certification, years of experience, and the types of diving the divers have been involved in.

Around 60% of all divers received their certification by PADI, which is also the main agency where people receive their certification. In addition, 29% of the divers received their certification with CMAS. This can be related to the large amount of individuals with a French or Swiss nationality since CMAS is a big player in the French and Swiss market. The divers had many types of certifications from different certifications agencies<sup>1</sup>. Around 39% of all the divers on St. Eustatius have an Advanced Open Water certification, which enables them to be involved in most of the dives. Another 17% of the divers had a Rescue Diver certification as their highest certificate, 17% of the respondents were in the possession of a Dive Master certificate. Around 14% of the divers only had the basic Open Water certificate; this can be related to the fact that a couple of interns started learning how to dive on St. Eustatius. Garrod and Gössling (2008) created different segments of diving tourist; they also created a segment of highly qualified divers and completely untrained divers. The most participants on St. Eustatius are highly qualified divers since 73% have at least an Advanced Open Water certification, which makes them 'highly qualified' divers instead of 'try divers'.

Most divers have quite some years of experience, around 28% indicated that they have 10 to 15 years of experience, and another 28% indicated that they have more than 15 years of experience. Only 7% of the divers did not have more than a year experience. In terms of experience the divers were also asked how many dives they completed in total, on average they completed 307 dives. However, one person completed 6000 dives. If this diver is not counted, the average number of completed dives is 232. The segments of Garrod and Gössling (2008) also looked at 'experienced' divers in contrast to 'novices'. The experienced divers have made many dives compared to the novices who are new to diving. Thus, according to the segments of Garrod and Gössling (2008) the divers on St. Eustatius are experienced divers since they completed an average 232 dives. This makes them definitely not new to diving.

Most participants (73%) indicated that they are not a member of a dive club; the other 27% indicated that they are a member of a dive club. The respondents were also asked if they use an underwater camera, 55% of the participants use a camera underwater and 45% of the respondents did not use one. In addition, the respondents were asked to indicate in which types of diving they have been involved. Scuba diving was the type of diving in which 94% of the participants were involved in. This makes sense since the most questionnaires were conducted at the dive centers. Many of the participants, around 64%, were also involved in snorkelling. Only 17% of the participants were involved in free diving, and just a few divers had participated in Snuba diving or diving with a

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<sup>1</sup> To organize the data and make it valuable all the types of certifications were classified by the certifications of PADI. This was the most convenient way to do since most of the divers on St. Eustatius have their certification from PADI. In order to create the same classifications a scale was used displaying the multiple classifications of the several certification agencies (MOC, 2010).

rebreather. In addition, the divers were asked to specify the type of scuba diving they have been involved in. In St. Eustatius multiple dives to wrecks are possible, and almost 92% of the divers indicated that they have been involved in wreck diving. In addition, 80% of the divers have been involved in drift diving, 77% of the respondents have done night dives. This can be related to the high amount of divers, 83%, who have at least an Advanced Open Water certification since this is necessary for a night dive. The involvement of the respondents in the other types of diving is shown in Table 6. These results indicate that the divers on St. Eustatius better fit the profile of 'generalist' instead of 'specialist'. A 'specialist' specialises in one type of diving activity, this can be underwater photography but also wreck diving (Garrod & Gössling, 2008). A 'generalist' likes to participate in a range of activities; this seems to better fit the profile of the divers on St. Eustatius (Garrod & Gössling, 2008).

For many of the participants their visit to St. Eustatius was not the first time in the Caribbean for diving. The results show that 83% have already been to the Caribbean before to dive. Besides, 56% of the respondents have dived in Africa and Asia before. The destinations where the respondents dived before is shown in Table 7.

Table 6. Involvement in different types of Scuba diving (N=78)

Type of Scuba diving	Percentage of involvement from the participants
Wreck diving	92%
Drift diving	80%
Night diving	77%
Wall diving	69%
Liveaboard diving	62%
Cave diving	14%
Ice diving	11%
Altitude diving	8%
Technical diving	8%

Table 7. Dive destinations visited before (N=78)

Destinations	Percentage of the participants who dived there
Caribbean	83%
Asia	56%
Africa	56%
Europe	51%
Americans	47%
Australia	18%
Netherlands	17%



## 7. Discussion & Conclusion



*Scubaqua & Dive Statia ©*

This chapter is the result of a research project that was conducted during a six-month period in 2014 and 2015. This chapter starts with the most important findings and a reflection on the theories used. Subsequently, the tourism policy of St. Eustatius will be discussed. This chapter will conclude with recommendations for tourism development on St. Eustatius, and recommendations for further research.

## 7.1 CONCLUSION

The aim of this thesis has been to understand diving in St. Eustatius from the perspective of social practice theory and by means of a questionnaire. The first research question was *‘What is the social practice of diving at St. Eustatius?’*.

Diving is more than only having nice views of the underwater surroundings. Diving means getting a feeling of being in ‘another world’. The diving practice enables divers to escape from the normal everyday life and enter a place where the stress and pressure of the outside world do not exist. Increased competences, safe and familiar diving equipment and the support of the producers of diving enable divers to enter this ‘other world’.

The competences needed for diving mainly stem from the level of certification and being experienced in diving. Diving with a high level of competence increases familiarity, confidence and the skills that are necessary to perform. Familiarity with the skills and the surroundings reinforces the feeling of being in ‘another world’. The materials used for diving exist among others things out of dive equipment; the equipment is an important aspect of the diving practice since diving is not possible without the equipment. Entering ‘another world’ is only possible when there is a feeling of safety and trust in the equipment. The trust and feeling of protection enables divers not to worry about their safety, to relax and enter ‘another world’. The different and mutual supporting elements of the diving practice enable divers to escape from their normal life, when being in this ‘other world’ there is no room for stress or thoughts about the world above water.

The producers of diving influence the diving practice in a positive way. The dive centers try to avoid stress underwater by diving in small groups. The atmosphere at St. Eustatius creates a feeling of being in the ‘Old Caribbean’, which fits the feeling of being in ‘another world’. Like the underwater world, St. Eustatius is a place that enables divers to relax and be worry-free.

Besides a greater understanding in diving, it is also useful to know more about the characteristics of the divers at St. Eustatius. The second research question therefore was: '*What is the socio-economic profile of the scuba divers that visit the island St. Eustatius?*'. Most divers are between 45 to 54 years old and come from The Netherlands, United States or France. Their level of education is high; almost half of them have a Bachelor or Master degree. The majority of the divers received their certification by PADI. The divers are highly experienced; most divers dived for at least 10 years and have a minimum of an Advanced Open Water certification.

Most divers visit the island for leisure, and for 30% to 40% of the divers it is a repeat visit to the island. Only 35% of the divers combine their trip to St. Eustatius with visits to other Caribbean islands; most of them visit St. Martin or Saba. On average the divers stay for nine days on the island, most of them stay at The Old Gin House, Statia Lodge or Golden Era Hotel. During their stay of nine days at St. Eustatius, the divers dive approximately 11 times. Most of them bring their own diving equipment.

Almost all the divers see diving as their key activity during their stay, but many are also involved in other activities. Besides diving, the most popular activities on the island are visiting the historical monuments and hiking.

The divers spent approximately \$2.000 to \$2.300 per week for their stay on St. Eustatius. This includes everything except for their international flight to St. Martin. They spent most of their money on accommodation, having meals at restaurants, and diving.

The favourite dive sites of the divers are the Charles Brown, Double Wreck, Chien Tong, and the Grand Canyon. Three out of four favourite dive sites are wrecks.

In sum, divers on St. Eustatius can be seen as dive fanatics for whom the main purpose of their stay is diving. They make many dives and are highly trained, and are mainly focused on the dive experience itself. Most divers do not dive at home but instead only abroad.

## 7.2 REFLECTION ON THEORY AND METHODS

The results of this research were derived with the use of a mixed methods approach. Because of this approach, it was possible to conduct qualitative and quantitative research at the same time. This was useful since there was only a limited amount of time to conduct fieldwork on St. Eustatius. Combining the two approaches provided a better understanding of the social practice of diving. The

quantitative research focused on the divers, their profile and their activities. Together, the qualitative and quantitative part of research provided a rich picture of diving on St. Eustatius.

For the qualitative research, the social practice theory was used. Since the researcher is a diver herself, the social practice theory helped her to look at the practice of diving from a different perspective. The different elements of the practice theory gave the researcher 'guidelines' to study diving. Without these 'guidelines' it would have been hard for the researcher to move from the position of a participant to the position of a researcher. The social practice theory helped the researcher to get a deeper understanding of diving, instead of only the interpretation from a participant's perspective. By using the different elements of a practice (meaning, competencies, and materials) in the interviews, it was easier for the participants to narrate the essence of diving. Together this created the possibility to grasp the fundamental nature of diving.

### 7.3 TOURISM POLICY ST. EUSTATIUS

This paragraph will discuss the current tourism policy of St. Eustatius from the perspective of dive tourism.

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#### 7.3.1 RELIABILITY EXISTENT DATA

As described in chapter two, it is difficult to estimate the current situation of tourism on St. Eustatius. In 2014, was estimated that there were around 19.000 tourists on St. Eustatius in 2013 (CBS, 2014). However, the CBS defined tourists as all the non-residents of St. Eustatius (CBS, 2014). This means that all the people that were on the island for business reasons and governmental purposes were counted for as tourists. Therefore, it is not possible to estimate the numbers of divers compared to the total amount of visitors. However, diving is the main touristic market segment on St. Eustatius, and according to this research there were around 1000-1200 divers on the island in 2013.

In order to develop sustainable tourism on St. Eustatius it is necessary to create a reliable system of data collection. For the future, it would be also valuable to subdivide tourists in different tourism segments. Thus, it is important to define and measure what a visitor, a tourist, a day-visitor, a cruise passenger, a dive tourist, and a business visitor is. This way it is possible to make distinctions between groups, and to make market segments. This makes it clear how many tourists come to the island to dive, for the nature, for the history, and for other purposes. The statistical data will show how the tourism industry is developing and what the actual and potential niche markets for the island are.

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### 7.3.2 NEW MARKET SEGMENTS

This research together with the Strategic Development Plan of St. Eustatius showed that the main touristic market segment on St. Eustatius is diving (Hoogenboezem-Lanslots *et al*, 2010). According to the Strategic Development Plan of the island hiking, adventure, and heritage travel are also part of the tourism product (Hoogenboezem-Lanslots *et al*, 2010). For the future, it is possible to expand the diving tourism industry but it is also interesting to look at different market segments that would be possible to exist besides diving tourism.

Beach tourism is something that barely exists at St. Eustatius due to lack of a real beach, and the (black) volcano sand. Because of the tide and strong current the size of the beach differs every day, sometimes there is hardly a beach and other days there are a few meters of beach. The St. Eustatius Tourism Development Foundation and the Commissioner of Tourism believe that a beach is necessary for the development of tourism. However, the current tourists at the island (the divers) do not agree with this. The divers do not miss a beach on the island because they are on the island to dive, not to go to the beach. In contrast, the divers are happy with the absence of a beach since this prevents other tourists to come to the island. When developing new forms of tourism this should not disturb the experience of diving because this can influence the overall diving experience. The quietness and tranquillity on St. Eustatius are part of the experience of diving and these unique elements can be disturbed by beach tourism. Other forms of tourism should never conflict with the essence of diving of entering 'another world'.

Another form of tourism that might disturb the quietness and tranquillity on St. Eustatius is cruise tourism. The Commissioner of Tourism and the St. Eustatius Tourism Foundation believe that cruise tourism will boost the economy of the island since cruise tourism involves many tourists at a time. Nevertheless, the divers are not in favour of cruise tourism. This is for the same reasons as why the divers are not in favour of beach tourism; the divers do not want that cruise tourism disturbs the experience of diving. When developing a new form of tourism on the island it is necessary to keep in mind the experiences that the divers are seeking on St. Eustatius. A new form of tourism needs to fit within the image of diving tourism. Therefore, it is probably better to look at other forms of tourism instead of cruise tourism or beach tourism since this can conflict with diving tourism.

In order to make tourism a sustainable business on the island, it is necessary to attract more tourists. When looking for new market segments it is interesting to look at segments who are interested in the same unique selling points as what the divers attract to the island, the quietness and tranquillity. Besides, it is important to look at a new market segment that can exist besides diving. Hiking tourism and historic tourism would be market segments that can coexist next to diving. Hiking and visiting

the historical monuments are already the two most favourite activities besides diving for most divers. At the same time, many divers believe that there are not enough activities to get involved with. At this moment, tourists really have to make an effort to find activities to undertake. St. Eustatius should be more active in promoting other activities besides diving.

Besides finding new market segments for the island, it is also possible to expand the current diving tourism industry. Only a limited number of divers visit the island each year, and for none of the participants of this research more dive tourists would be a problem. Getting divers more involved in other activities on St. Eustatius, would help to spread the revenues from diving tourism.

In sum, probably the most important thing to keep in mind when developing other market segments or new activities on the island are the unique selling points that attract the divers to the island. The divers like the quietness and the tranquillity, and this should not be disturbed. Most participants do not mind when there would be more tourists coming to the island, although they would prefer it when this would be small-scale tourism instead of mass tourism.

#### 7.4 RECOMMENDATIONS FOR TOURISM DEVELOPMENT IN ST. EUSTATIUS

The recommendations of this research are based on the missing facilities and services according to the divers. All the participants of this research loved the diving, and all the other diving facilities on St. Eustatius. Unfortunately, they also missed some facilities on the island such as accommodation, infrastructure, touristic facilities and activities, and service minded hospitality workers.

##### ACCOMMODATION - SMALL SCALE LODGES

St. Eustatius only has a couple of facilities for accommodation. This is also visible in the quantitative data that showed that most of the tourists stay in The Old Gin House, Statia Lodge, or the Golden Era Hotel. The divers see it as a disadvantage that there is only a limited amount of choice in housing facilities. If St. Eustatius wants to develop tourism on the island, it needs to expand the capacity of beds on the island. Luckily, St. Eustatius is aware of this as described in the Strategic Development Plan of the island. When creating new tourism accommodation it is important to look at the preferences of accommodation for the divers. When new forms of accommodation do not match with the preferences of the divers, it can have great consequences. For the future, it would be beneficial to invest in small-scale accommodation. This would fit the preferences of the divers, and it fits with the unique selling points of the island.

#### INFRASTRUCTURE - BETTER FLIGHT CONNECTIONS

The connection with the other islands in the Caribbean is poor, which makes the island hard to reach for tourists. The tourists that want to visit the island need to put in extra time, effort, and money to visit the island. The actual flight time from St. Maarten to St. Eustatius is only 20 minutes, but the stopover times at St. Martin are quite long due to bad connections between the international flights and the domestic flights in the Caribbean. Another disadvantage for the tourists is the high airfare between St. Maarten and St. Eustatius. Besides, the tourists cannot visit other Caribbean islands before going back to St. Maarten since this is the only scheduled connection with another island. In addition to the lack of infrastructure with the other islands, the infrastructure on St. Eustatius is also poor. Due to bad roads or no roads, a part of the island is impassable.

The infrastructure is not only a problem for dive tourists; it is also a problem for the dive centers and indirectly for other businesses on the island. The dive centers lose customers because they are sometimes not able to book a plane ticket on the busy WINAIR flights. This also affects other businesses on St. Eustatius since the divers spend their money at different places on the island. The St. Eustatius Tourism Development Foundation and the Commissioner of Tourism are aware of the problems with the infrastructure on the island. However, St. Eustatius should find a solution for the problem of the connection with the other Caribbean islands. It is impossible for St. Eustatius to develop and expand sustainable tourism on the island when the infrastructure to the island is bad. The limited amount of seats available on the plane makes it impossible for more tourists to reach the island.

#### MORE TOURIST FACILITIES & ACTIVITIES

Many divers miss touristic facilities on the island. An example of this is the very limited choice in restaurants, bars, and shops. Because of the lack of touristic facilities, the divers feel that the island is not prepared for tourism. Some tourists also miss the availability of other activities on the island. While diving is for the most of them the main activity, some still want to be involved in another activity. There are possibilities for hiking or historical tours on the island, only this is difficult to arrange for the tourist due to the lack of information and irregular opening hours. Not enough facilities and activities can influence the stay of the tourist, but the island is also losing revenue whenever the tourists are not able to spend their money while they are on holiday. None of the participants of this research would recommend St. Eustatius to non-divers, while all the participants do recommend the island to divers. They do not recommend it to non-divers due to the lack of facilities and activities. For the future, the island needs to invest in more tourism facilities and activities, this in order to meet the needs of the divers but also to be able to attract other kinds of tourist to the island.



#### TRAINING HOSPITALITY WORKERS

The participants of this research felt that the hospitality services on the island (the restaurants, bars, and hotels) was below par. Many divers thought that the cuisine in the restaurants could be better, and they also missed the feeling of being welcome. The divers thought that the attitude of the locals towards tourism was negative. Nevertheless, the divers did not blame the locals for the moderate service because the divers felt that the hospitality workers were not properly trained. This results in a poor quality of service compared to the prices at St. Eustatius. For the island, it is necessary to improve the service in order to keep up with the competition from other Caribbean islands.

When St. Eustatius wants to develop sustainable tourism on the island, the workers that deliver those services need to get proper training. This can be arranged by practical hospitality training in the work environment.

#### REDUCE THE WASTE

A trash dump does not fit the image of a Caribbean island, and trash lying down on the whole island does not fit the image of sustainable tourism. The divers who participated in this research described the trash as a weakness of the island, and they believed that the trash was a serious problem for the island that needs to be resolved. The trash can also harm the natural resources of the island, such as the nature on the island and in the water. Whenever St. Eustatius attracts more tourists to the island, this would also increase the waste production on the island. Therefore, it is necessary to find a solution before the problem gets bigger, and might harm the natural resources.

#### INVOLVEMENT LOCALS

On St. Eustatius there seems to be little local support for tourism development. A large proportion of the local population is not involved or not interested. Before investing a lot of time, money, and energy in the development of tourism, a key requirement is to get the locals involved. Without local support, development of tourism on the island is impossible, and depends primarily on initiatives from people abroad.

In sum, several changes are necessary to support a sustainable development of tourism on the island. However, before making changes it is necessary to think what the overall consequences of this change will be. A clear strategy for the future will help to think about the growth of tourism on St. Eustatius, the consequences that are linked to that growth, and the requirements that are necessary to facilitate that growth.



## 7.5 RECOMMENDATIONS FOR FURTHER RESEARCH

Before developing sustainable tourism on St. Eustatius, it would be useful to first invest in further research. The most important issue to investigate is the willingness and ability of locals to be involved in the tourism industry. If the locals do not want to be involved in this industry it does not make much sense to invest in this sector. Therefore, it would be useful to see if and under what conditions the locals are willing and able to be involved in tourism, and when they are in what kind of way they want to be involved

It would be also interesting to look at the possibilities for developing other touristic market segments besides dive tourism. By conducting market research, it becomes clear if there is a market for hiking tourism or historical tourism on St. Eustatius. Market research can also indicate if there are still possibilities to grow for the diving industry on the island. By investigating this topic it becomes clear if there is a market for hiking tourism, historical tourism or a bigger market for diving tourism on St. Eustatius. Market research can also indicate if facilities such as better connections between the Caribbean islands are necessary to facilitate a certain kind of niche tourism. Besides, with the help of market research it is possible to see if it is profitable to invest in a new kind of niche tourism.

In addition to market research of other touristic segments, it is useful to investigate the pros and cons for cruise tourism. At this moment, St. Eustatius is in favour of cruise tourism but the divers are not fond of the idea. Therefore, it would be useful to know the advantages and disadvantage in order to make an informed choice about cruise tourism.

St. Eustatius needs to compete with other islands in the region, which all offer a different touristic product. For St. Eustatius, it would be useful to compare its tourism product with the tourism products of other islands in the region. It will be useful to be aware of the strengths and weaknesses of St. Eustatius compared to the other islands in the area.

For the island, it is also useful to investigate the diving tourism industry on the other islands in the region. It would be interesting to see if different kinds of divers visit those other islands, or if divers who visit the other islands are also as fanatic as on St. Eustatius. Besides, it is important to know if St. Eustatius is an expensive dive destination compared to the other islands in the area. However, when investigating the dive expenses on St. Eustatius compared to the other islands, it is also necessary to take into account the quality of the dive product.

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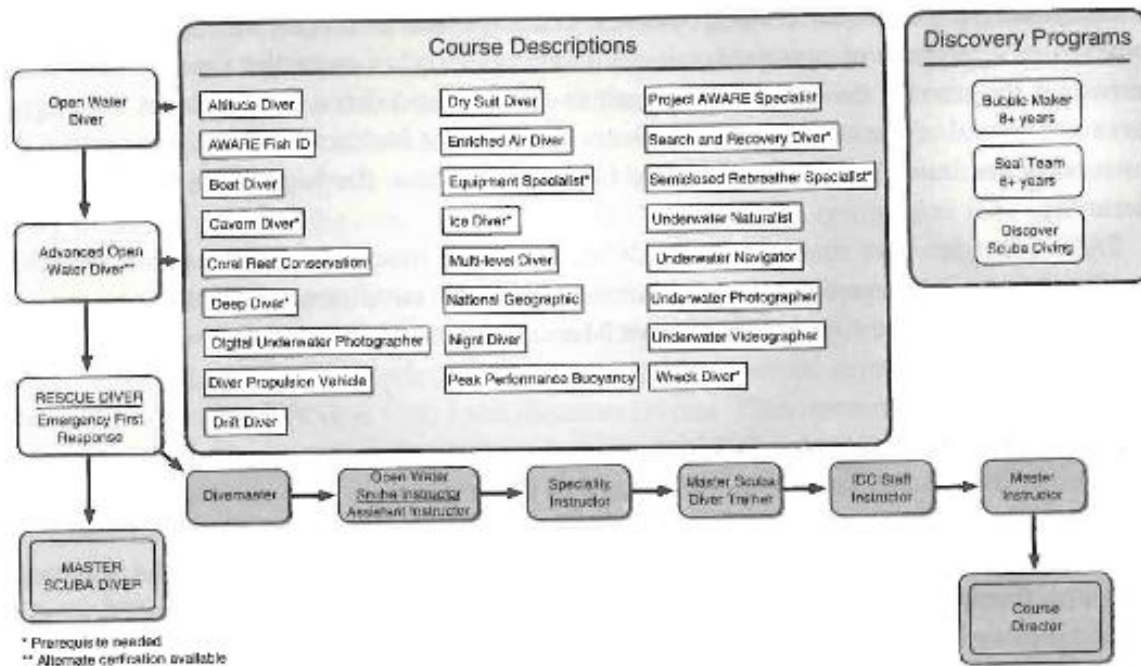
## APPENDIX I – STATIA NATIONAL MARINE PARK DIVE MAP



Source: St. Eustatius National Marine Park



## APPENDIX II – PADI COURSE



PADI courses and educational hierarchy (source: Garrod & Gössling, 2008, p. 123)

This appendix is a summary of what all the concepts of figure 4 mean.

**Snorkeling:** is the practice of swimming with the use of a diving mask, snorkel, and fins. The snorkeler is able to stay at the surface of the water but with their face in the water, because of the equipment the snorkeler is able to breathe and explore the underwater world.

**Snuba:** is a mix between snorkelling and diving and is possible until a depth of 6 meters. The advantages of snuba are that you do not need any certificates or training and less equipment.

**Scuba diving:** is the practice of underwater diving. The diver uses breathing apparatus to breathe underwater (Original Diving).

- Cave diving, the practice of diving in a cave.
- Ice diving, the practice of diving underneath ice.
- Dry suit diving, the practice of diving in a dry suit which keeps divers warm under cold/extreme circumstances.
- Wreck diving, the practice of diving targeted at a sunken wreck.
- Wall diving, the practice of diving along a vertical reef/wall.
- Night diving, the practice of diving during the evening.
- Liveaboard diving, the practice of diving from a boat as the main holiday purpose. The boat brings the divers to different dive sites.
- Technical diving, the practice of diving for the more experienced divers. Most of the time it involves going to deeper surfaces, which involves using enriched air which helps divers to stay underwater for a longer amount of time.
- Altitude diving, diving at an altitude higher than 300 meters (most of the time in a mountain lake).
- Drift diving, the practice of diving in which the diver uses the current to move underwater.

**Free diving:** is also the practice of underwater diving, only with the big exception that the diver uses his/her own breath.

**Diving with rebreathing apparatus:** again the practice of underwater diving, this time the diver uses the rebreather to breathe. The rebreather 'recycles' part of the exhaled air into 'new' air. With this system the diver can spend a longer time underwater compared to the original system of scuba diving.

## APPENDIX IV – OVERVIEW DIVE TYPOLOGIES



### Luxe duikliefhebbers

Luxe duikliefhebbers (veel ervaring en hoge uitgaven) zijn niet erg frequente duikers in Zeeland. Opvallend is dat deze groep op zoek is naar kwaliteit en toegevoegde waarde. Omdat ze verder weg wonen, komen ze vaak voor meerdere dagen naar Zeeland. Het directe gevolg hiervan is dat ze meer geld uitgeven aan toerisme.

### Sportieve duikrecreanten

Sportieve duikrecreanten (weinig ervaring en hoge uitgaven) besteden gemiddeld veel aan de duiksport, en dat terwijl duiken slechts één van de sporten is die ze beoefenen. Deze groep is zowel kansrijk als kwetsbaar: als ze besluiten om fanatieker te gaan duiken, zijn ze wellicht te verleiden tot vervolgopleidingen en het aanschaffen van een eigen duiktrusting. Als ze deze stap niet maken, kunnen ze incidentele vakantieduikers worden.



### Startende duikers

Voor startende duikers (weinig ervaring en lage uitgaven) geldt dat ze alleen kansrijk zijn als ze duiken als sport belangrijker gaan vinden én meer ervaring opdoen in Zeeland. Het potentieel van deze groep is het hoogst als ze zich ontwikkelen tot sportieve duikrecreanten of luxe duikliefhebbers.

### Fanatieke 'low budget' duikers

Fanatieke 'low budget' duikers (veel ervaring en lage uitgaven) hebben een kleiner groeipotentieel. Deze duikers hebben al veel opleidingen gevolgd, kennen de weg in Zeeland en geven relatief weinig geld uit. Fanatieke 'low budget' duikers kunnen wel een belangrijke rol vervullen als ambassadeur voor Zeeland. Ze kennen en waarderen de onderwaterwereld van Zeeland als geen ander en kunnen daar enthousiast over vertellen!



### Incidentele vakantieduikers

Incidentele vakantieduikers (weinig ervaring en lage uitgaven) zijn het minst kansrijk voor Zeeland. Over het algemeen hebben deze duikers weinig interesse om in Zeeland te komen duiken: ze duiken af en toe in het buitenland en hebben niet de intentie om van duiken hun favoriete hobby te maken. Duiken is voor hen gekoppeld aan exotische locaties; de voordelen van Zeeland sluiten niet of nauwelijks aan.

Overview of the five dive typologies (Nederlandse Onderwatersport Bond, 2011).

### Interview schedule for semi-structured interviews

Social practice of diving

Interview length: 45-55 minutes

#### About the interviewee: Can you tell me something about yourself?

- Sex M/F
- Age \_\_\_\_\_
- Profession \_\_\_\_\_

Date:

Time:

---

#### Introduction

Thank you for participating! For my thesis at the Wageningen University, I am doing research for the Tourism Development Foundation of St. Eustatius. This interview together with other interviews and a survey will help to collect as much data as possible about the divers at St. Eustatius. This will help to create a better understanding of the social practice of diving. For the island this will be helpful for their visitor management, to enable sustainable marketing, and for marketing purposes.

This interview will take around 45-55 minutes during this time six topics will be discussed. For convenience I would like to ask your permission to record this interview.

This interview will be anonymous and the data will be handled in a confidential manner.

---

#### Meaning

- Why do you dive? / What are your motivations to dive?
- What is the significance/importance of diving in your everyday life?
- What emotions evoke when you think about diving?
  - Why do you relate these emotions to diving?
- How would you explain the kick/adrenaline that you get from diving?
- Is it possible for you to name characteristics that you relate to diving?
  - Why do you relate these characteristics to diving?

#### Competence

- Can you tell me something about the dive experience that you have?
- How do you develop yourself as a diver?
  - Regarding your diving skills
- How do you maintain your diving qualifications?
- What is your favorite type of diving and why?

**Material/ Dive Map St. Eustatius**

- Can you tell me something (with the use of this map) about the dives you have made during your stay?
  - Why these specific dive sites?
- What is appealing of these dive sites?
  - Can you explain the kick/adrenaline that you get from diving at those dive sites?
- Is there specific dive material needed for these dive sites?
  - Why this material?

**Material**

- What is for you the importance of dive material?
    - Own material or rent?
    - What is the reason for this?
    - In case of rent, where and why there?
- 

**Doings**

- Which other activities have you been involved in during your stay at the island?
- Did you visit other places during this trip?
  - If yes, which places and why?
- What was the main reason to visit St. Eustatius?

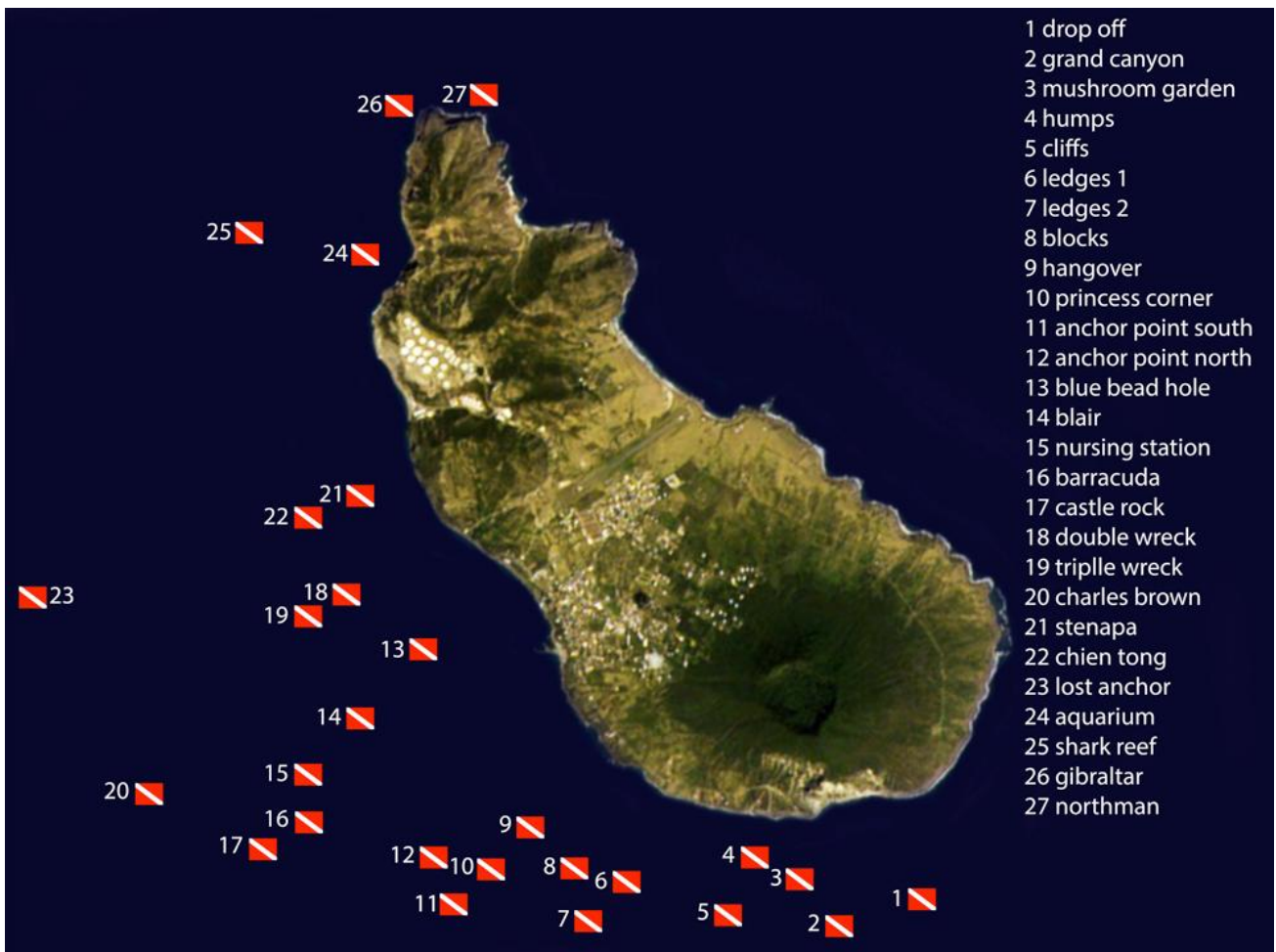
**Producers of the practice**

- Would crowding at the reef affect the overall product of diving at St. Eustatius for you?
    - Why?
  - What are the unique selling points of St. Eustatius?
    - Why?
  - What do you perceive as a weakness of St. Eustatius?
    - Why?
  - What kind of opportunities are there for St. Eustatius to improve their 'product'?
    - Why do you believe these are opportunities for the island?
- 

**Closure**

- The interviewer summarizes the key points of the interview  
Thank you for your time and help to participate for this research.

## Dive Map St. Eustatius – interview



Dive sites St. Eustatius (source: Scubaqua)

### Interview schema voor semi-gestructureerde interviews

Interview duur: 45-55 minuten

#### Over de geïnterviewde: iets over zichzelf vertellen?

- Geslacht M/V
- Leeftijd \_\_\_\_\_
- Beroep \_\_\_\_\_

Datum:

Tijd:

---

#### Introduction

Hartelijk bedankt voor uw medewerking. Voor mijn scriptie aan de Universiteit van Wageningen doe ik onderzoek voor de Tourism Development Foundation van St. Eustatius. Dit interview samen met andere interviews zullen helpen om zoveel mogelijk inzicht te krijgen in de duikers die het eiland als toerist bezoeken. Dit zal bijdragen aan het creëren van een duikers profiel van de duikers op St. Eustatius. Dit onderzoek kan bijdragen aan beheer van de bezoekersaantallen, om duurzaam toerisme te bevorderen en voor marketing doelstellingen.

Dit interview zal ongeveer 45-55 minuten duren en zes verschillende onderwerpen zullen in deze tijd worden besproken. Graag zou ik u toestemming willen vragen om dit interview op te nemen.

Het interview is anoniem en alle gegevens zullen vertrouwelijk worden gebruikt.

---

#### Betekenis

- Waarom duikt u? / Wat is uw motivatie om te duiken?
- Wat is voor uw de betekenis van duiken in het alledaagse leven?
- Welke emoties worden bij u opgeroepen wanneer u aan duiken denkt?
  - Waarom legt u deze emoties in verband met duiken?
- Kunt u uitleggen wat voor 'kick' u krijgt van duiken? / Wat voor adrenaline er vrij komt?
- Zijn er bepaalde woorden of eigenschappen die u in verband brengt met duiken?
  - Waarom brengt u deze eigenschappen in verband met duiken?

#### Bekwaamheid

- Kunt u mij iets vertellen over de duikervaring die u heeft?
- Hoe ontwikkelt u zichzelf als een duiker?
  - o Omtrent duikvaardigheden
- Hoe onderhoud u uw duikvaardigheden
- Wat is uw favoriete soort duiken? ( bijv. Cave, ice, wreck, wall, night, boot, hoogte, stroom etc. )

## **Materiaal/duikkaart St. Eustatius**

- Kunt u mij iets vertellen met behulp van deze kaart over de duiken die u heeft gemaakt tijdens uw verblijf?
  - Waarom deze duikplekken?
- Wat vond u aantrekkelijk aan deze duikplekken?
  - Wat voor soort adrenaline/kick kwam er vrij toen u op deze plekken ging duiken?
- Had u een specifieke duikuitrusting nodig voor deze duiken?
  - Waarom deze uitrusting?

## **Materiaal**

- Wat is voor u het belang van duikmateriaal?
    - Eigen material of huur?
    - Wat is hiervoor de reden?
    - In case of rent, where and why there?
- 

## **(Doings)**

- Welke andere activiteiten bent u betrokken in geweest tijdens u verblijf of het eiland?
- Heeft u andere eilanden/plekken bezocht tijdens uw reis?
  - Ja, welke plekken en waarom?
- Wat is de hoofdreden of St. Eustatius te bezoeken?
  - Waarom is dit de hoofdreden?

## **Producers of the practice**

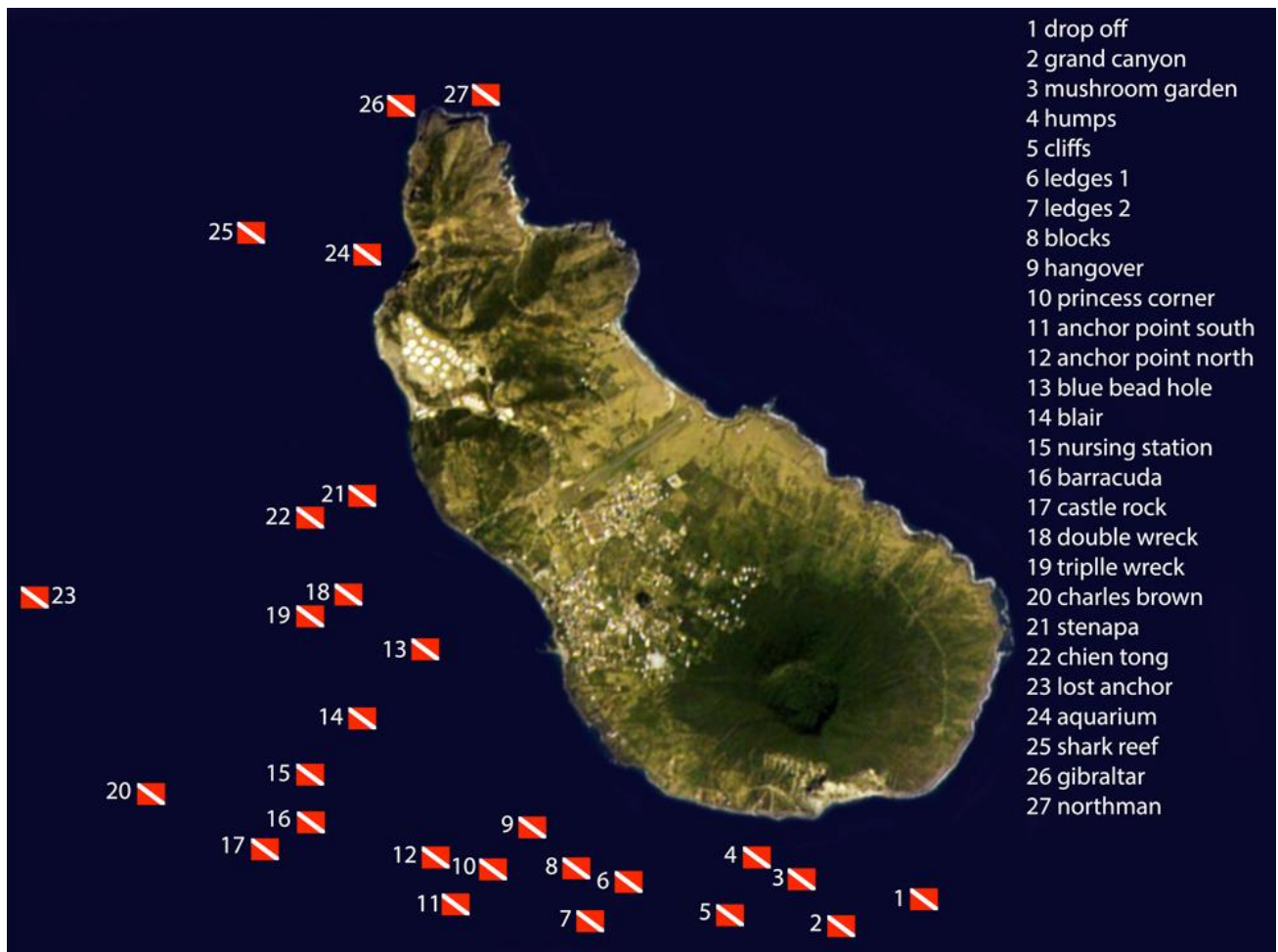
- Zou drukte in het water (crowding) effect hebben op het duikproduct van St. Eustatius?
    - Waarom?
  - Wat vindt u de unique selling point van St. Eustatius?
    - Waarom?
  - Wat vindt u een zwakte van St. Eustatius?
    - Waarom?
  - Wat zou u kansen vinden voor St. Eustatius om het toeristische product van het eiland te verbeteren?
    - Waarom denkt u dat dit kansen zijn voor het eiland?
- 

## **Afsluiting**

- The interviewer summarizes the key points of the interview. Thank you for your time and help to participate for this research.



## Duikkaart St. Eustatius – interview



Dive sites St. Eustatius (source: Scubaqua)

## Diving tourism St. Eustatius

Dear participant,

Thank you for participating and filling out this survey. This questionnaire is created in order to get insight in two topics related to diving: the socio-economic profile of the divers at St. Eustatius, and the perception of divers towards St. Eustatius reefs. Your input will be essential for this research and your time investment is greatly appreciated. This questionnaire was developed within the framework of the Triple P @ Sea research program that is carried out by Wageningen UR to support sustainable and economic development of St. Eustatius. The questionnaire consists of 43 open-ended and closed questions and it will take about 20 minutes to complete. The information provided will be treated anonymously and will be compiled and analyzed as a group. The results will be disseminated into a report that can be provided to you on request. If you have any questions or concerns, please contact Rene Henkens (coordinator of this project, [rene.henkens@wur.nl](mailto:rene.henkens@wur.nl)).

### St. Eustatius

1. *Is this the first time visiting St. Eustatius? Please check one, if you check **NO** please indicate how many times you have been to St. Eustatius.*

- ☐ Yes  
☐ No, it is the ..... time

2. *What is the main purpose of your stay at St. Eustatius? Please check one.*

- ☐ Leisure  
☐ Business  
☐ Other, namely.....

3. *With whom are you travelling? Multiple answers are possible.*

- ☐ Spouse  
☐ Family  
☐ Friends  
☐ Nobody, I am travelling alone.  
☐ Other, namely.....

4. *Did you combine this trip with visits (minimum stay of 1 night) to other Caribbean islands? Please check one, if you check **YES** please indicate which Caribbean islands.*

- ☐ Yes, namely:  
.....  
.....  
☐ No

5. *What is the total number of overnight stays at St. Eustatius? Please check one.*

..... days

6. *At which accommodation are you staying? Please check one.*

- ☐ Country Inn
- ☐ Golden Era Hotel
- ☐ The Old Gin House
- ☐ Statia Lodge
- ☐ Cherry Tree House Exclusive
- ☐ Harbor View Apartments
- ☐ Kings Well Resort
- ☐ Homestay
- ☐ Other, namely .....
- ☐ Prefer not to say

7. *Is diving the key activity of your stay at St. Eustatius? Please check one.*

- ☐ Yes
- ☐ No

8. *Have you been or will you be involved in any other activities next to diving? Please check one, if you check **YES** please indicate which activities.*

- ☐ Yes, namely:
  - ☐ Hiking
  - ☐ Visiting historical sites (e.g. Fort de Windt, Fort Oranje, Synagogue Ruins)
  - ☐ Visiting museums (e.g. Sint Eustatius Museum, Sint Eustatius Historical Foundation)
  - ☐ Visiting the Botanical Gardens
  - ☐ Visiting landmarks (e.g. White Cliffs, The Quill)
  - ☐ Visiting beaches (e.g. Oranje Bay, Zeelandia Beach, Lynch Beach)
  - ☐ Dining
  - ☐ Other, namely .....
- ☐ No

9. *What is your daily average spending per person on St. Eustatius (excluding accommodation & diving cost)? Please check one.*

- ☐ Less than \$25,-
- ☐ \$25,- to \$74,-
- ☐ \$75,- to \$99,-
- ☐ \$100,- to \$149,-
- ☐ \$150,- to \$199,-
- ☐ \$200,- or more
- ☐ Prefer not to say

10. *Where did you hear about this tourist destination? Multiple answers are possible.*

- ☐ Friends and relatives
- ☐ The Internet
- ☐ Travel agency
- ☐ Dive magazines
- ☐ Books and guides
- ☐ Fairs and/or exhibitions
- ☐ Media
- ☐ It was part of the travel package
- ☐ I already knew it
- ☐ Other, namely.....

## Diving St. Eustatius

11. *Do you rent your diving equipment or do you have your own diving equipment? Please check one.*

- Rental equipment
- Own equipment
- Both

12. *What is the total number of dives you plan to take on St. Eustatius?*

..... dives

13. How would you grade diving in St. Eustatius on a scale from 1 to 10 (1=terrible and 10=excellent)? Please encircle one.

Terrible									Excellent
1	2	3	4	5	6	7	8	9	10

14. *What is the best asset of diving in St. Eustatius? Please check one.*

- The marine ecosystem (e.g. corals and fish)
- The visibility
- The wrecks
- The archaeology
- The island itself
- The quality of the dive center
- The tranquillity and quietness
- Other, namely.....

15. *Would you recommend Statia to others?*

- Yes, because

.....

.....

.....

- No, because

.....

.....

.....

16. *What would be necessary for you to return to St. Eustatius?*

.....

.....

.....

.....

.....

17. In appendix 1 you can find the six pictures A-F, rank those pictures in order of what you find most appealing to dive on (1=least appealing, 6=most appealing).

	Least appealing					Most appealing
Rank	1	2	3	4	5	6
Picture (A-F)						

18. In appendix 2 you can find a map of the dive sites of St. Eustatius. Can you indicate according to the map, which are your favourite dive sites on St. Eustatius? Please indicate a top three by writing down the numbers of the dive sites. If you do not know the location, write down the name of the dive site.

---

**Top 3:**

1.

2.

3.

---

## Diving

19. At which scuba diving agency did you receive your certification? Please check one.

- ☐ PADI - Professional Association of Diving Instructors
  - ☐ NAUI - National Association of Underwater Instructors
  - ☐ BSAC - British Sub-Aqua Club
  - ☐ CMAS - Confederation Mondiale des Activites Subaquatiques
  - ☐ SDI - Scuba Diving International
  - ☐ SSI - Scuba Schools International's
  - ☐ TDI - Technical Diving International
  - ☐ Other, namely .....
- 

20. What diving certification or certifications do you have?

---

.....

.....

.....

.....

---

21. How many years of diving experience do you have? Please check one.

- ☐ Less than 1 year
  - ☐ 1 to 3 years
  - ☐ 3 to 6 years
  - ☐ 6 to 9 years
  - ☐ 10 to 15 years
  - ☐ More than 15 years
- 

22. How many dives have you completed since you started diving?

..... dives

---

23. Are you a member of a dive club? Please check one.

- ☐ Yes
  - ☐ No
- 

24. Do you use an underwater camera? Please check one.

- ☐ Yes
  - ☐ No
-

25. *Could you check in what types of diving you have been involved? Multiple answers are possible, if you check **SCUBA DIVING** please indicate in which types of scuba diving you have been involved.*

- ☐ Snorkelling
- ☐ Snuba
- ☐ Free diving
- ☐ Diving with rebreathing apparatus
- ☐ Scuba diving
  - ☐ Cave diving
  - ☐ Ice diving
  - ☐ Wreck diving
  - ☐ Wall diving
  - ☐ Night diving
  - ☐ Liveaboard diving
  - ☐ Altitude diving
  - ☐ Drift diving
  - ☐ Technical diving (e.g. going deeper than recreational scuba divers)
  - ☐ Other, namely .....
- ☐ Other, namely .....

26. *In which destinations have you dived before? Multiple answers are possible.*

- ☐ Caribbean (e.g. Curacao, Bonaire, Bahamas)
- ☐ Americas (e.g. Mexico, Belize, Honduras, Hawaii)
- ☐ Europe (e.g. Spain, Turkey, Greece, Scandinavia)
- ☐ Africa (e.g. Egypt, Oman, Mozambique)
- ☐ Asia (e.g. Thailand, Indonesia, Malaysia, Philippines)
- ☐ Australia
- ☐ The Netherlands
- ☐ Other, namely.....

### Crowding & Impact of diving

27. *What is the maximum amount of divers you would tolerate in one group/per guide? Please write down the number.*

..... divers

28. *How many encounters with other dive groups would impair your experience? Please write down the number.*

..... encounters

29. *How many divers should be allowed daily on a single dive site? Please write down the number.*

..... divers

30. *Does it matter how many other divers are around? Please check one and indicate why you have chosen that answer.*

- ☐ Yes, because  
.....  
.....  
.....
- ☐ No, because  
.....  
.....  
.....

31. What do you consider impact caused by diving? Please encircle the three you consider most severe.

- ☐ 1 Breaking coral
- ☐ 2 Touching coral
- ☐ 3 Touching animals
- ☐ 4 Photographing
- ☐ 5 Feeding Animals
- ☐ 6 Coastal development
- ☐ 7 Stirring up sediments
- ☐ 8 Swimming over corals
- ☐ 9 Walking over the sea bed
- ☐ 10 Other, namely .....

32. Which of the activities above have you observed in St. Eustatius? Please write down the corresponding number(s), multiple answers are possible.

Number(s): .....

33. What do you think about when you hear the term sustainable development of diving tourism?

.....  
.....  
.....  
.....

## Landscaped Reefs

The next set of questions will be on landscaped reefs. Landscaped reefs are reefs with a human-made origin, also known as “man-made reefs” or “artificial reefs”. They are typically build to promote marine life or to catch substrates. You saw some examples of landscaped reefs in the pictures from appendix 1.

34. The pictures from appendix 1 show three types of landscaped reefs, namely shipwrecks (picture B and F), reef balls (picture A and E) and biorock structures (picture C and D). Have you dived on one of these three types of landscaped reefs? Please check one, if you check **NO** please continue with question 36.

- ☐ Yes
- ☐ No (continue with question 36)

35. What kind of experiences do you have diving on reef balls or bio rocks? Please check one.

- ☐ Very poor
- ☐ Poor
- ☐ Neutral
- ☐ Good
- ☐ Very Good
- ☐ I haven't seen these types yet

36. Would you dive on landscaped reefs? Please check one and indicate why you have chosen that answer.

- ☐ Yes, because  
.....  
.....
- ☐ No, because  
.....  
.....

37. Score the following statements on a 5 point scale. Please encircle one for every statement.

	<b>Landscaped reefs:</b>	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly Agree</b>
1.	Provide a new habitat for marine life	1	2	3	4	5
2.	Relieve diving pressure of natural reefs	1	2	3	4	5
3.	Attract appealing marine life	1	2	3	4	5
4.	Disrupt the local ecosystem	1	2	3	4	5
5.	Are a good alternative to natural dive sites	1	2	3	4	5
6.	Pollute the view	1	2	3	4	5

38. What would landscaped reefs in the shallows add to your diving holiday?

- ☐ Snorkelling opportunities
- ☐ Diving opportunities
- ☐ Nothing
- ☐ Other, namely .....

39. Can you describe how an attractive landscaped reef would look like for you?

.....

.....

.....

.....

## Demographic Information

This section asks **demographic questions** about you. This information is **necessary to create a complete profile of the divers at St. Eustatius**. The data you share with us **will not be used to personally identify you**, and will not be passed on to anyone else. If you prefer not to answer these questions, check the following box 'prefer not to say'.

40. What is your gender? Please check one.

- ☐ Male
- ☐ Female
- ☐ Prefer not to say

41. What is your age? Please check one.

- ☐ Under 18 years
- ☐ 18 to 24 years
- ☐ 25 to 34 years
- ☐ 35 to 44 years
- ☐ 45 to 54 years
- ☐ 55 to 64 years
- ☐ Age 65 or older
- ☐ Prefer not to say

What is your nationality? Please check one, if you check **OTHER** please write down your nationality.

- ☐ Dutch
- ☐ United States
- ☐ Canada
- ☐ Other, namely .....



42. What is the highest level of education you have completed? Please check one.

- ☐ Less than high school
- ☐ High school graduate
- ☐ Some college
- ☐ Associate's degree
- ☐ Bachelor's degree
- ☐ Master's degree
- ☐ Advanced graduate work or Ph. D.
- ☐ Prefer not to say

43. What was your total household income before taxes during the past 12 months? Please check one for US dollars **OR** Euro's.

In US dollars		In Euro's	
<input type="radio"/>	Less than \$25,000	<input type="radio"/>	Less than €20,000
<input type="radio"/>	\$25,000 to \$34,999	<input type="radio"/>	€20,000 to €29,999
<input type="radio"/>	\$35,000 to \$ 49,999	<input type="radio"/>	€30,000 to 39,999
<input type="radio"/>	\$50,000 to 74,999	<input type="radio"/>	€40,000 to €59,999
<input type="radio"/>	\$75,000 to 99,999	<input type="radio"/>	€60,000 to €79,999
<input type="radio"/>	\$100,000 to 149,999	<input type="radio"/>	€80,000 to €120,000
<input type="radio"/>	\$150,000 or more	<input type="radio"/>	€120,000 or more
<input type="radio"/>	Prefer not to say		

*You have successfully completed the survey.  
Thank you for your participation!*

## Le tourisme de plongée à Saint-Eustache

Cher, chère participant,

Merci pour votre participation à ce sondage. Ce questionnaire a été créé dans le but d'obtenir un aperçu de deux des sujets liés à la plongée: le profil socio-économique des plongeurs à Saint-Eustache, et la perception des plongeurs les récifs de Saint-Eustache. Votre données seront essentielles pour cette recherche et nous vous remercions pour le temps passé à répondre ce questionnaire. Il a été élaboré dans le cadre du programme de recherche Triple P @ Sea qui est effectuée par l'Université de Wageningen pour soutenir le développement durable et économique de St.Eustache. Le questionnaire se compose de 44 questions ouvertes et fermées et il vous faudra environ 20 minutes pour le compléter. Les informations fournies seront traitées de manière anonyme, seront compilées et analysées globalement. Les résultats seront diffusés dans un rapport qui peut être fourni sur demande. Si vous avez des questions ou des préoccupations, s'il vous plaît contactez René Henkens (coordinateur de ce projet, [rene.henkens@wur.nl](mailto:rene.henkens@wur.nl)).

### Saint-Eustache

1. Est-ce la première fois que vous visitez Saint-Eustache? Cochez une réponse. Si c'est « non », indiquez le nombre de fois que vous êtes déjà venu.

- ☐ Oui
- ☐ Non,..... fois

2. Quel est le but principal de votre séjour à Saint-Eustache? Choisissez une réponse.

- ☐ Loisir
- ☐ Affaires / travaux
- ☐ Autre,.....

3. Avec qui voyagez-vous? Plusieurs réponses sont possibles.

- ☐ Famille
- ☐ Amis
- ☐ Conjoint(e)
- ☐ Je suis seul
- ☐ Autre,.....

4. Avez-vous combiné ce voyage avec d'autres visites dans les Caraïbes (séjour minimum de 1 nuit)? Cochez une réponse. Si vous cochez "OUI", indiquez quelles îles des Caraïbes.

- ☐ Oui :  
.....  
.....
- ☐ Non

5. Quel est le nombre total de nuit passées à Saint-Eustache? S'il vous plaît noter le nombre de nuits.

..... nuits

6. Où logez-vous? Cochez une réponse.

- ☐ Country Inn
- ☐ Golden Era Hotel
- ☐ The Old Gin House
- ☐ Statia Lodge
- ☐ Cherry Tree House Exclusive
- ☐ Harbor View Apartments
- ☐ Kings Well Resort
- ☐ Homestay
- ☐ Autre,.....
- ☐ Préfère ne pas répondre

7. Est ce la plongée l'activité principale de votre séjour à Saint-Eustache? Cochez une réponse.

- ☐ Oui
- ☐ Non

8. Avez-vous été ou serez-vous impliqué dans d'autres activités à côté de la plongée? Cochez une réponse. Si "OUI", indiquez laquelle.

- ☐ Oui, à savoir:
  - ☐ Randonnée
  - ☐ Visite de sites historiques (par exemple Fort de Windt, Fort Oranje, Ruines Synagogue)
  - ☐ Visiter les musées (par exemple, Sint Eustatius Musée, Sint Eustatius Historical Foundation)
  - ☐ Visite des jardins botaniques
  - ☐ Visite sites d'intérêt (par exemple White Wall, Le Quill)
  - ☐ Visite plages (par exemple Oranje Bay, Zeelandia Beach, Plage Lynch)
  - ☐ Gastronomie
  - ☐ Autre,.....
- ☐ Non

9. Quelle est votre dépense quotidienne moyenne par personne sur Saint-Eustache (hors frais de logement & plongée)? Cochez une réponse.

- ☐ Moins que \$40,-
- ☐ \$40,- à \$79,-
- ☐ \$80,- à \$119,-
- ☐ \$120,- à \$159,-
- ☐ \$160,- à \$199,-
- ☐ \$200,- ou plus
- ☐ Préfère ne pas répondre

10. Où avez-vous entendu parler de cette destination touristique? Plusieurs réponses sont possibles.

- ☐ Amis et famille
- ☐ Internet
- ☐ Agence de tourisme
- ☐ Les magazines de plongée
- ☐ Les livres et guides
- ☐ Les foires et / ou expositions
- ☐ Les médias
- ☐ Cela ait partie du voyage
- ☐ Je connaissais déjà
- ☐ Autre,.....

### Plongée à Saint-Eustache

11. Vous louez votre matériel de plongée ou avez-vous votre propre équipement de plongée? Cochez une réponse.

- ☐ Equipement de location
- ☐ Propre équipement
- ☐ Les deux

12. Quel nombre de plongées prévoyez-vous de faire à Saint-Eustache? S'il vous plaît noter le nombre de plongées.

..... plongées

13. Comment évaluez-vous la plongée à Saint-Eustache sur une échelle de 1 à 10 (1=épouvantable et 10=excellent)? Se il vous plaît encercler une réponse.

Epouvantable									Excellent
1	2	3	4	5	6	7	8	9	10

14. Quelle est la meilleure caractéristique de plongée à Saint-Eustache? Cochez **une** réponse.

- ☐ L'écosystème marin (par exemple des coraux et poissons)
- ☐ La visibilité
- ☐ Les épaves
- ☐ L'archéologie
- ☐ L'île elle-même
- ☐ La qualité des center de plongée
- ☐ La tranquillité et le calme
- ☐ Autre, à savoir.....

15. Recommanderiez-vous Statia à d'autres personnes?

☐ Oui, parce que

.....  
.....  
.....

☐ Non, parce que

.....  
.....  
.....

16. Que faudrait-il pour que vous retourniez à Saint-Eustache?

.....  
.....  
.....  
.....

17. Dans l'annexe 1, vous pouvez trouver les six photos A-F. Classer les photos dans l'ordre de ce que vous trouvez la plus attrayante pour plonger sur (1 = le moins attrayants, 6 = le plus attrayant).

	Le moins attrayant					Le plus attrayant	
Rang	1	2	3	4	5	6	
Photo (A-F)							

18. Dans l'annexe 2, vous pouvez trouver une carte des sites de plongée de Saint-Eustache. Pouvez-vous indiquer en fonction de la carte, quels sont vos sites de plongée préférés sur Saint-Eustache? S'il vous plaît énoncez un top 3 en écrivant le numéro des sites de plongée. Si vous ne connaissez pas l'emplacement, notez le nom du site de plongée.

**Le top 3:**

1.

2.

3.

## Plongée Sous-marine

19. De quelle association de plongée? Cochez une réponse.

- ☐ PADI - Professional Association of Diving Instructors
- ☐ NAUI - National Association of Underwater Instructors
- ☐ BSAC - British Sub-Aqua Club
- ☐ CMAS - Confederation Mondiale des Activites Subaquatiques
- ☐ SDI - Scuba Diving International
- ☐ SSI - Scuba Schools International's
- ☐ TDI - Technical Diving International
- ☐ Autre, à savoir.....

20. Quel niveau de plongée avez-vous?

---

---

---

21. Combien d'années d'expérience de plongée avez-vous? Cochez une réponse.

- ☐ Moins d'un an
- ☐ 1 à 3 ans
- ☐ 3 à 6 ans
- ☐ 6 à 9 ans
- ☐ 10 à 15 ans
- ☐ Plus de 15 ans

22. Combien de plongées avez-vous au total?

..... plongées

23. Êtes-vous membre d'un club de plongée?

- ☐ Oui
- ☐ Non

24. Utilisez-vous un appareil photo sous-marin?

- ☐ Oui
- ☐ Non

25. Quel type de plongée pratiquez-vous? Plusieurs réponses sont possibles. Si vous choisissez **PLONGÉE SOUS-MARINE** s'il vous plaît précisez quels types de plongée sous-marine.

- ☐ Snorkeling
- ☐ Snuba (respiration assistée en surface)
- ☐ Plongée en apnée
- ☐ Plongée en recycleur
- ☐ Plongée sous-marine
  - ☐ plongée souterraine
  - ☐ plongée sous glace
  - ☐ plongée sur épave
  - ☐ plongée sur tombant
  - ☐ plongée de nuit
  - ☐ plongée en croisière
  - ☐ plongée en altitude
  - ☐ plongée en dérive
  - ☐ plongée Tek (par exemple, Procédures de déco, Trimix, CCR, Spéléo)
  - ☐ autre,.....
- ☐ Autre,.....

---

26. Dans quelles destinations avez-vous déjà plongé? Plusieurs réponses sont possibles.

- ☐ Caraïbes (exemple: Curaçao, Bonaire, Bahamas)
  - ☐ Amériques (exemple: le Mexique, le Belize, le Honduras, Hawaïi)
  - ☐ Europe (exemple: l'Espagne, la Turquie, la Grèce, la Scandinavie)
  - ☐ Afrique (exemple: l'Égypte, Oman, Mozambique)
  - ☐ Asie (exemple: Thaïlande, Indonésie, Malaisie, Philippines)
  - ☐ Australie
  - ☐ Pays-Bas
  - ☐ Autre,.....
- 

### Impact de la PLONGÉE sous-marine

27. Quel est le montant maximum de plongeurs que vous tolérer dans un groupe / par guide? S'il vous plaît noter le nombre de plongeurs.

---

..... plongeurs

---

28. Combien de rencontres avec d'autres groupes de plongée nuiraient à votre expérience? S'il vous plaît noter le nombre de rencontres.

---

..... rencontres

---

29. Combien de plongeurs devraient être autorisés tous les jours sur un site de plongée unique? S'il vous plaît noter le nombre de plongeurs.

---

..... plongeurs

---

30. Est-ce important le nombre de plongeurs sont autour? Cochez une réponse et mentionnez pourquoi vous avez choisi cette réponse.

- ☐ Oui, parce que  
.....  
.....  
.....
  - ☐ Non, parce que  
.....  
.....  
.....
-

31. Quelle activité liée à la plongée est la plus néfaste selon vous pour l'environnement sous-marin? Encercler les trois meilleures réponses.

- ☐ 1 briser les coraux
- ☐ 2 toucher les coraux
- ☐ 3 toucher les animaux
- ☐ 4 photographie sous-marine
- ☐ 5 Nourrir la faune
- ☐ 6 l'aménagement du littoral
- ☐ 7 l'agitation des sédiments
- ☐ 8 nager à proximité des coraux
- ☐ 9 marche sur le fond de la mer
- ☐ 10 autre,.....

32. Parmi les activités dessus laquelle avez-vous observé sur Saint-Eustache? S'il vous plaît notez le(s) numéro (s) correspondant. Plusieurs réponses sont possibles.

Numéro (s): .....

33. Que pensez-vous du développement durable à long terme du tourisme en plongée?

.....  
.....  
.....

## Récifs artificiels

La prochaine série de questions sera sur les récifs artificiels. Ils ont une origine anthropique, aussi connu comme "récifs aux origines non-naturelles". Ils sont généralement construits de promouvoir la vie marine ou pour attraper des substrats. Vous avez vu quelques exemples de récifs artificiels dans les photos de l'annexe 1.

34. Les photos de l'annexe 1 montrent trois types de récifs artificiels, à savoir les épaves (image B et F), 'récif-boulle' (image A et E) et des structures de 'Bioroches' (photo C et D). Avez-vous plongé sur l'un de ces trois types de récifs artificiels? Cochez une réponse, si "NON" passez à la question 36.

- ☐ Oui
- ☐ Non (passez à la question 36)

35. Comment s'est passée votre expérience de plongée sur des récif-boules ou bio roches (photo A, C, D, E)? Cochez une réponse.

- ☐ Médiocre
- ☐ Mauvais
- ☐ Neutre
- ☐ Bon
- ☐ Très bon
- ☐ Je ne l'ai pas vu ces types



36. Plongeriez-vous sur des récifs artificiels? Cochez une réponse et mentionnez pourquoi vous avez choisi cette réponse.

- ☐ Oui, parce que  
.....  
.....
- ☐ Non, parce que  
.....  
.....

37. Organisez les affirmations suivantes sur une échelle de 5 points. Encerclez pour chaque affirmation.

Récifs paysagers:	Fortement en désaccord	Désaccord	Neutre	D'accord	Fortement d'accord
1. Fournir un nouvel habitat pour la vie marine	1	2	3	4	5
2. Relâcher la pression des plongeurs des récifs naturels	1	2	3	4	5
3. Attirer la vie marine attrayant	1	2	3	4	5
4. Perturber l'écosystème local	1	2	3	4	5
5. Sont une bonne alternative aux sites de plongée naturelles	1	2	3	4	5
6. Polluer la vue	1	2	3	4	5

38. Qu'est-ce que les récifs artificiels dans les eaux peu profondes peuvent ajouter à vos vacances de plongée?

- ☐ Possibilités de Snorkeling
- ☐ Possibilités de plongée sous-marine
- ☐ Rien
- ☐ Autre,.....

39. Pouvez-vous décrire comment un récif artificiels attrayant ressemblerait pour vous?

.....

.....

.....

.....

## Information démographiques

Cette section pose des questions démographiques sur vous. Les informations sont nécessaires pour créer un profil complet des plongeurs à Saint-Eustache. Les données que vous partagez avec nous ne seront pas utilisées pour vous identifier personnellement, et ne seront pas transmises. Si vous préférez ne pas répondre à ces questions, cochez la case suivante "préfère ne pas répondre".

40. Quel est votre sexe? Cochez une réponse.

- ☐ Homme
- ☐ Femme
- ☐ Préfère ne pas répondre

41. Quel est votre âge? Cochez une réponse.

- ☐ Moins de 18 ans
- ☐ 18 à 24 ans
- ☐ 25 à 34 ans
- ☐ 35 à 44 ans
- ☐ 45 à 54 ans
- ☐ 55 à 64 ans
- ☐ 65 and ou plus
- ☐ Préfère ne pas répondre

42. Quelle est votre nationalité? Cochez une réponse. Si vous choisissez "autres" mentionnez votre nationalité.

- ☐ Néerlandais
- ☐ Américain
- ☐ Canadien
- ☐ Autre,.....

43. Quel est le plus haut niveau de scolarité que vous avez complété? Cochez une réponse.

- ☐ Moins que le secondaire
- ☐ Le "Bac" / Etudes secondaires
- ☐ Etudes supérieures
- ☐ Etudes universitaires
- ☐ Master
- ☐ Spécialisation(s)
- ☐ Ph.D. ou supérieures
- ☐ Préfère ne pas répondre

44. Quelle a été votre revenu total du ménage avant impôt au cours des 12 derniers mois? Choisissez entre le dollar américain ou l'euro.

Dollar américain		l'Euro	
<input type="radio"/>	Moins de \$25,000	<input type="radio"/>	Moins de €20,000
<input type="radio"/>	\$25,000 à \$34,999	<input type="radio"/>	€ 20,000 à € 29,999
<input type="radio"/>	\$35,000 à \$ 49,999	<input type="radio"/>	€30,000 à 39,999
<input type="radio"/>	\$50,000 à 74,999	<input type="radio"/>	€40,000 à €59,999
<input type="radio"/>	\$75,000 à 99,999	<input type="radio"/>	€60,000 à €79,999
<input type="radio"/>	\$100,000 à 149,999	<input type="radio"/>	€80,000 à €120,000
<input type="radio"/>	\$150,000 ou plus	<input type="radio"/>	€120,000 ou plus
<input type="radio"/>	Préfère ne pas répondre		

**Vous avez terminé l'enquête.  
Merci pour votre participation!**

## Duiktoerisme St.Eustatius

Hartelijk dank dat u mee wilt doen aan een onderzoek dat inzicht moet geven in twee onderwerpen gerealiseerd aan duiken: het sociaal-economisch profiel van duikers op St. Eustatius en naar de duikersperceptie van de riffen van St.Eustatius. Uw inbreng is van essentieel belang voor dit onderzoek en uw tijdsinvestering wordt sterk gewaardeerd. Deze vragenlijst is ontwikkeld binnen het kader van het onderzoeksprogramma “Triple P@Sea” dat door Wageningen UR wordt uitgevoerd om duurzame en economische ontwikkeling van St.Eustatius te ondersteunen. In totaal bestaat de vragenlijst 44 open- en gesloten vragen en het duurt ongeveer 20 minuten om te voltooien. Alle antwoorden zullen anoniem behandeld worden en als groep geanalyseerd worden. De resultaten worden verwerkt in een rapport dat op verzoek naar u toegezonden kan worden. Als u vragen of zorgen heeft kunt u contact opnemen met de coördinator van deze studie, Rene Henkens (rene.henkens@wur.nl).

### St. Eustatius

1. Is dit de eerste keer dat u St. Eustatius bezoekt? Selecteer één antwoord, als u **NEE** selecteert wilt u dan aangeven hoe vaak u op het eiland bent geweest.

- ☐ Ja  
☐ Nee, dit is de ..... keer

2. Wat is de belangrijkste reden voor uw verblijf op St. Eustatius? Graag één antwoord aankruisen.

- ☐ Niet werk gerelateerd  
☐ Zakelijk  
☐ Anders, namelijk.....

3. Met wie reist u? Meerdere antwoorden zijn mogelijk.

- ☐ Partner  
☐ Familie  
☐ Vrienden  
☐ Niemand, ik reis alleen.  
☐ Anders, namelijk.....

4. Heeft u deze reis gecombineerd met een bezoek aan andere Caribische eilanden (minimum verblijf van 1 nacht)? Selecteer één antwoord, als u **JA** selecteert wilt u dan aangeven welke Caribische eilanden.

- ☐ Ja, namelijk:  
.....  
.....  
☐ Nee

5. Hoeveel nachten verblijft u op St. Eustatius? Schrijf het aantal op.

..... nachten

6. Bij welke accommodatie verblijft u? Graag één antwoord aankruisen.

- ☐ Country Inn
- ☐ Golden Era Hotel
- ☐ The Old Gin House
- ☐ Statia Lodge
- ☐ Cherry Tree House Exclusive
- ☐ Harbor View Apartments
- ☐ Kings Well Resort
- ☐ Homestay
- ☐ Anders, namelijk.....
- ☐ Wil ik liever niet zeggen

7. Is duiken de belangrijkste activiteit tijdens u verblijf op St. Eustatius? Graag één antwoord aankruisen.

- ☐ Ja
- ☐ Nee

8. Bent u betrokken geweest bij andere activiteiten op het eiland naast het duiken? Selecteer één antwoord, als u **JA** selecteert wilt u dan aangeven welke andere activiteiten.

- ☐ Ja, namelijk:
  - ☐ Wandelen
  - ☐ Bezoeken van historische monumenten (e.g. Fort de Windt, Fort Oranje, Synagogue Ruins)
  - ☐ Bezoeken musea (e.g. Sint Eustatius Museum, Sint Eustatius Historical Foundation)
  - ☐ Bezoeken van de Botanische Tuinen
  - ☐ Bezoeken van herkenningspunten (e.g. White Cliffs, The Quill)
  - ☐ Bezoeken stranden (e.g. Oranje Bay, Zeelandia Beach, Lynch Beach)
  - ☐ Uiteten
  - ☐ Anders, namelijk.....
- ☐ Nee

9. Wat zijn uw dagelijks gemiddelde uitgaven per persoon op St. Eustatius (exclusief de accommodatie & duik kosten)? Graag één antwoord aankruisen in dollars **OF** euro's.

- |   |  |
|---|--|
| <input type="radio"/> Minder dan \$40,-         | <input type="radio"/> Minder dan €30,- |
| <input type="radio"/> \$40,- tot \$79,-         | <input type="radio"/> €30,- to €59,-   |
| <input type="radio"/> \$80,- tot \$119,-        | <input type="radio"/> €60 to €89,-     |
| <input type="radio"/> \$120,- tot \$159,-       | <input type="radio"/> €90,- to €129,-  |
| <input type="radio"/> \$160,- tot \$199,-       | <input type="radio"/> €130,- to €159,- |
| <input type="radio"/> \$250,- of meer           | <input type="radio"/> €160,- of meer   |
| <input type="radio"/> Wil ik liever niet zeggen |  |

10. Waar heeft u over St. Eustatius gehoord? Meerdere antwoorden zijn mogelijk.

- ☐ Vrienden en familie
- ☐ Het Internet
- ☐ Reisbureau
- ☐ Duiktijdschriften
- ☐ Boeken en gidsen
- ☐ Beurzen
- ☐ Media
- ☐ Het was onderdeel van een reispakket
- ☐ Ik kende het al
- ☐ Anders, namelijk.....

## Duiken St. Eustatius

11. Huurt u uw duikuitrusting of heeft u uw eigen duikuitrusting? Graag één antwoord aankruisen.

- ☐ Huur duikuitrusting
- ☐ Eigen duikuitrusting
- ☐ Beide

12. Hoeveel duiken wilt u in totaal gaan maken op St. Eustatius? Graag één antwoord aankruisen.

- ☐ Minder dan 6
- ☐ 6 tot 10
- ☐ 10 tot 14
- ☐ 14 tot 18
- ☐ Meer dan 18

13. Welk rapportcijfer zou u het duiken op St.Eustatius geven op een schaal van 1-10 (1=verschrikkelijk en 10 is uitmuntend)? Selecteer één antwoord.

Verschrikkelijk									Uitmuntend	
1	2	3	4	5	6	7	8	9	10	

14. Wat vindt u het meest aantrekkelijk aan het duiken op Statia? Graag één antwoord aankruisen.

- ☐ Het mariene ecosysteem (bijv. koralen en vis
- ☐ Het zicht
- ☐ De wrakken
- ☐ De archeologie
- ☐ Het eiland op zich
- ☐ De kwaliteit van de duikcentra
- ☐ Omdat het rustig is
- ☐ Anders, namelijk.....

15. Zou u St.Eustatius aan anderen aanraden? Graag één antwoord aankruisen.

- ☐ Ja, omdat  
.....  
.....  
.....
- ☐ Nee, omdat  
.....  
.....  
.....

16. Wat zou er nodig zijn opdat u St.Eustatius nogmaals zou willen bezoeken?

.....  
.....  
.....  
.....

17. In bijlage 1 kunt u de zes afbeeldingen A t/m F vinden. **Rangschik** de afbeeldingen A-F in volgorde van aantrekkelijkheid (1=minst aantrekkelijk, 6=meest aantrekkelijk).

	Minst aantrekkelijk					Meest aantrekkelijk	
Rank	1	2	3	4	5	6	
Picture (A-F)							

18. In bijlage 2 is een duikkaart te zien van St. Eustatius. Kunt u aangeven met behulp van de kaart, wat uw favoriete duikplekken zijn? Geef in de tabel een top drie aan door middel van het opschrijven van de nummers van de duikplekken.

**Top 3:**

1.

2.

3.

## Duiken

19. Bij welke scuba organisatie heeft u uw duikcertificaat behaald? Graag één antwoord aankruisen.

- ☐ PADI - Professional Association of Diving Instructors
- ☐ NAUI - National Association of Underwater Instructors
- ☐ BSAC - British Sub-Aqua Club
- ☐ CMAS - Confederation Mondiale des Activites Subaquatiques
- ☐ SDI - Scuba Diving International
- ☐ SSI - Scuba Schools International's
- ☐ TDI - Technical Diving International
- ☐ Anders, namelijk.....

20. Welk(e) duik certificaat/certificaten heeft u?

.....

.....

.....

21. Hoeveel jaar duikervaring heeft u? Graag één antwoord aankruisen.

- ☐ Minder dan 1 jaar
- ☐ 1 tot 3 jaar
- ☐ 3 tot 6 jaar
- ☐ 6 tot 9 jaar
- ☐ 10 tot 15 jaar
- ☐ Meer dan 15 jaar

22. Hoeveel duiken heeft u voltooid sinds u bent begonnen met duiken? Schrijf het aantal op.

..... dives

23. Bent u lid van een duik club? Graag één antwoord aankruisen.

- ☐ Ja
- ☐ Nee

24. Gebruikt u een onderwatercamera? Graag één antwoord aankruisen.

- ☐ Ja
- ☐ Nee

25. Kunt u aangeven in wat voor soort vorm van duiken u betrokken bent geweest? Meerdere antwoorden zijn mogelijk, wanneer u **DUIKEN** (scuba) selecteert mag u ook aangeven in wat voor soort vorm van duiken (scuba) u betrokken bent geweest.

- ☐ Snorkelen
- ☐ Snuba
- ☐ Vrij duiken
- ☐ Duiken met rebreathing apparatuur
- ☐ Duiken (scuba)
  - ☐ Grotduiken
  - ☐ IJsduiken
  - ☐ Wrackduiken
  - ☐ Wall diving
  - ☐ Nachtduiken
  - ☐ Bootduiken
  - ☐ Altitude duiken
  - ☐ Drift duiken
  - ☐ Technisch duiken (e.g. bijvoorbeeld dieper gaan dan een recreatie duiker)
  - ☐ Anders, namelijk.....
- ☐ Anders, namelijk .....

26. In welke andere duikgebieden heeft u eerder gedoken? Meerdere antwoorden mogelijk.

- ☐ Het Caribisch gebied (e.g. Curaçao, Bonaire, Bahama's)
- ☐ De Noord- en Zuid-Amerikaanse gebieden (e.g. Mexico, Belize, Honduras, Hawaii)
- ☐ Europa (e.g. Spanje, Turkije, Griekenland, Scandinavië)
- ☐ Afrika (e.g. Egypte, Oman, Mozambique)
- ☐ Azië (e.g. Thailand, Indonesië, Malaysië, Filipijnen)
- ☐ Australië
- ☐ Nederland
- ☐ Elders, namelijk.....

## Impact van duiken

27. Wat is het maximale aantal duikers dat u in een groep of per gids zou tolereren? Schrijf het aantal op.

..... duikers

28. Hoeveel ontmoetingen met andere duikgroepen zouden uw duikervaring negatief beïnvloeden? Schrijf het aantal op.

..... ontmoetingen

29. Hoeveel duikers op plek x zouden maximaal toegestaan moeten worden? Schrijf het aantal op.

..... duikers

30. Maakt het uit hoeveel andere duikers er aanwezig zijn? Waarom? Graag één antwoord aankruisen.

- ☐ Ja, omdat.....
- ☐ Nee, omdat.....

31. Wat verstaat u onder negatieve invloeden veroorzaakt door duiken? Graag drie antwoorden aankruisen die volgens u de meest negatieve invloed veroorzaken.

- ☐ 1 Breken van koraal
- ☐ 2 Aanraken van koraal
- ☐ 3 Dieren aanraken
- ☐ 4 Fotograferen
- ☐ 5 Dieren voeren
- ☐ 6 Kustontwikkeling
- ☐ 7 Sedimenten beroeren
- ☐ 8 Zwemmen over koralen
- ☐ 9 Over de zeebodem lopen
- ☐ 10 Anders, namelijk.....

32. Heeft u een of meerdere van bovenstaande activiteiten op St.Eustatius waargenomen? Zo ja, welke?

**Nummer(s):** .....

33. Waar denkt u aan bij duurzame ontwikkeling van duiktoerisme?

.....  
.....  
.....

## Aangelegde riffen

De volgende set vragen zal gaan over aangelegde riffen. Deze riffen zijn in eerste instantie aangelegd door mensen en worden ook wel met de termen “kunstrif” of “artificieel rif” aangeduid. Deze riffen worden doorgaans aangelegd om zeeleven aan te trekken of sedimenten vast te leggen. U heeft een aantal voorbeelden van aangelegde riffen op de afbeeldingen op de vorige pagina gezien.

34. De afbeeldingen van bijlage 1 laten drie verschillende typen zien, namelijk schipwrakken (afbeelding B en F), rifballen (afbeelding A en E) en “Biorock” structuren (afbeelding C en D). Heeft u eerder op een van deze drie typen aangelegde riffen gedoken? Graag één antwoord aankruisen.

- ☐ Ja
- ☐ Nee (ga verder met vraag 36)

35. Wat was uw ervaring met het duiken op rifballen of “Biorocks”?

- ☐ Zeer slechte
- ☐ Slechte
- ☐ Neutrale
- ☐ Goede
- ☐ Zeer goede
- ☐ Ik heb deze vormen nog niet gezien

36. Zou u op aangelegde riffen duiken?

- ☐ Ja, omdat  
.....  
.....  
.....
- ☐ Nee, omdat  
.....  
.....  
.....



37. Geef aan in hoeverre u het met de volgende stellingen eens of oneens bent (1=zeer mee oneens, 2=gematigd mee oneens, 3=gematigd mee eens, 4=zeer mee eens ). Omcirkel uw keuze.

Aangelegde riffen:						
1.	Bieden een nieuw leefgebied voor zeeleven	1	2	3	4	5
2.	Verlichten de duikdruk op natuurlijke riffen	1	2	3	4	5
3.	Trekken interessante dieren aan	1	2	3	4	5
4.	Verstoren het ecosysteem	1	2	3	4	5
5.	Zijn een goed alternatief voor natuurlijke duikstekken	1	2	3	4	5
6.	Vervuilen het uitzicht	1	2	3	4	5

38. Wat zou een aangelegd rif aan uw duikvakantie toevoegen?

- ☐ Mogelijkheden voor snorkelen
- ☐ Mogelijkheden voor duiken
- ☐ Niets
- ☐ Anders, namelijk.....

39. Kunt u omschrijven welke aspecten een aangelegd rif aantrekkelijk zouden maken?

.....

.....

.....

## Demografische Informatie

Het volgende onderdeel van de enquête is gericht op demografische informatie over u. Deze informatie is nodig om een compleet profiel te schetsen van de duikers op St. Eustatius. De gegevens die u deelt worden niet gebruikt om u persoonlijk te identificeren en zullen niet aan derden worden verleend. Als u een vraag liever niet invult dan kunt u het vakje aankruisen 'wil ik liever niet zeggen'

40. Wat is uw geslacht? Graag één antwoord aankruisen.

- ☐ Man
- ☐ Vrouw
- ☐ Wil ik liever niet zeggen

41. Wat is uw leeftijd? Graag één antwoord aankruisen.

- ☐ Onder 18 jaar
- ☐ 18 tot 24 jaar
- ☐ 25 tot 34 jaar
- ☐ 35 tot 44 jaar
- ☐ 45 tot 54 jaar
- ☐ 55 tot 64 jaar
- ☐ 65 jaar of ouder
- ☐ Wil ik liever niet zeggen

42. Wat is uw nationaliteit? Graag één antwoord aankruisen.

- ☐ Nederlands
- ☐ Amerikaans
- ☐ Canadees
- ☐ Anders, namelijk.....

43. Wat is u hoogst genoten opleiding? Graag één antwoord aankruisen.

- ☐ Basisonderwijs
- ☐ Middelbare school
- ☐ Vervolgopleiding begonnen maar niet afgemaakt
- ☐ MBO diploma
- ☐ Bachelor's diploma
- ☐ Master's diploma
- ☐ Ph. D.
- ☐ Wil ik liever niet zeggen

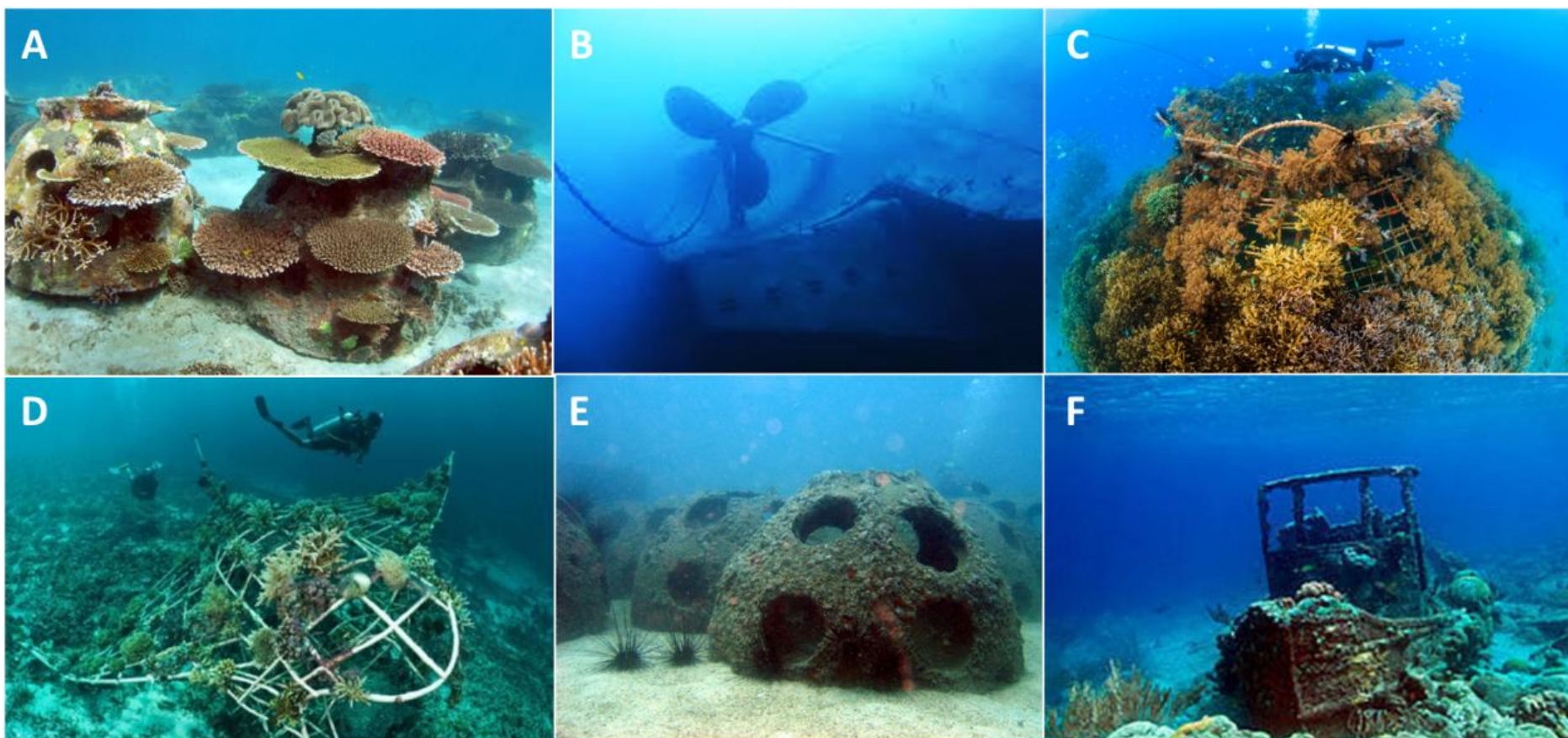
44. Wat was uw gemiddelde jaarinkomen over de afgelopen 12 maanden? Graag één antwoord aankruisen. Graag één antwoord aankruisen in dollars **OF** euro's.

In US dollars	In Euro's
<input type="radio"/> Minder dan \$25,000	<input type="radio"/> Minder dan €20,000
<input type="radio"/> \$25,000 tot \$34,999	<input type="radio"/> €20,000 tot €29,999
<input type="radio"/> \$35,000 tot \$ 49,999	<input type="radio"/> €30,000 tot 39,999
<input type="radio"/> \$50,000 tot 74,999	<input type="radio"/> €40,000 tot €59,999
<input type="radio"/> \$75,000 tot 99,999	<input type="radio"/> €60,000 tot €79,999
<input type="radio"/> \$100,000 tot 149,999	<input type="radio"/> €80,000 tot €120,000
<input type="radio"/> \$150,000 of meer	<input type="radio"/> €120,000 of meer
<input type="radio"/> Wil ik liever niet zeggen	

*U heeft de volledige enquête ingevuld.  
Hartelijk dank voor uw deelname!*

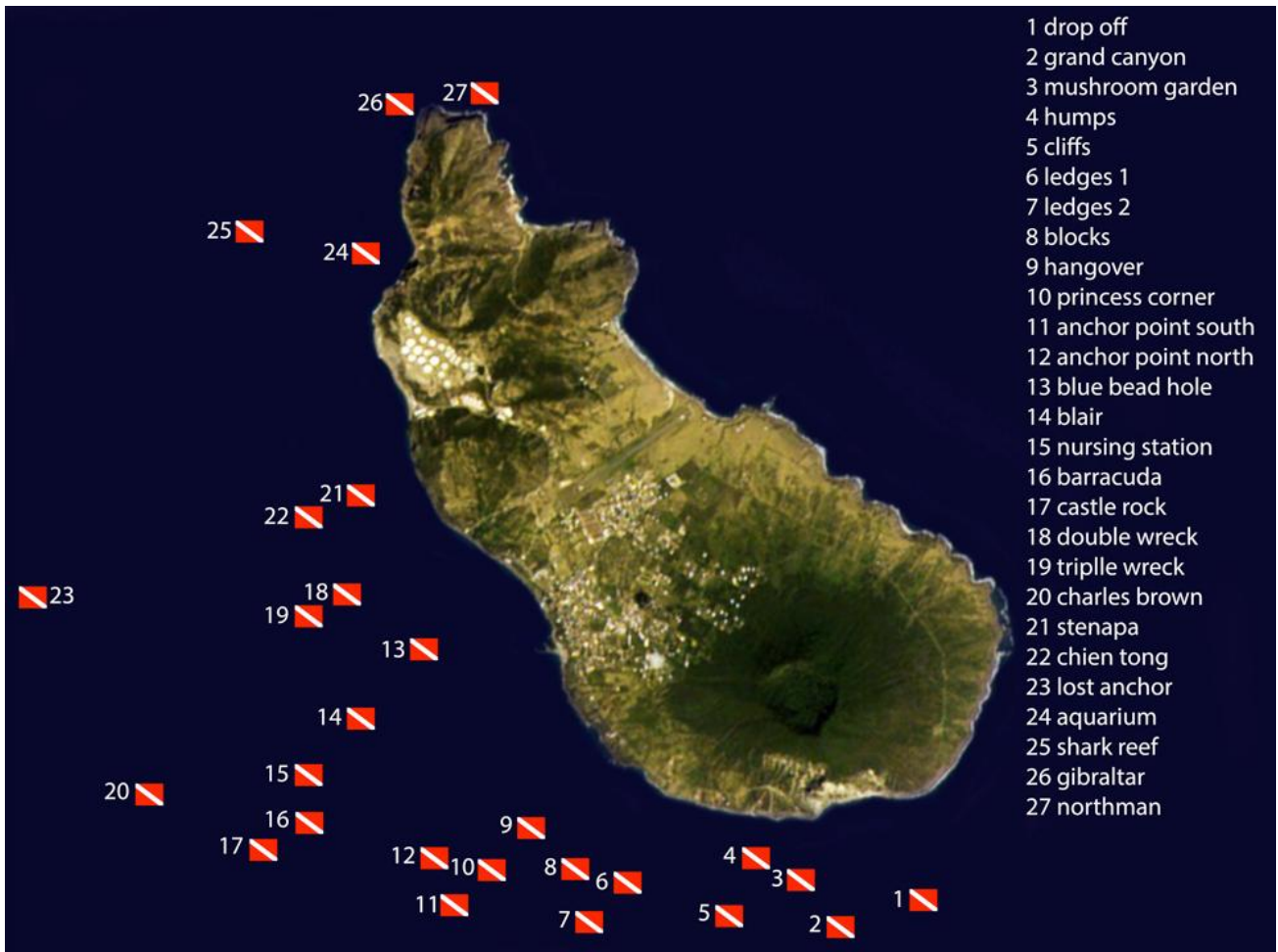
## APPENDIX X – APPENDIX QUESTIONNAIRES

Appendix for question 17 & 34



Images by reefball.org, taucher.net, Ciaran Edwards, Brandon Cole and curacao-actief.com. The shown structures are overgrown with coral and serve as an example.

# Appendix for question 18



Dive sites St. Eustatius (source: Scubaqua)

## APPENDIX XI – QUANTITATIVE ANALYSIS

SPSS test	Question number & question
<b>Descriptive statistics, frequencies test, count</b>	<p>Q1a. Number of visits to St. Eustatius.</p> <p>Q9. What is your daily average spending per person on St. Eustatius (excluding accommodation cost)?</p> <p>Q44. What was your total household income before taxes during the past 12 months?</p>
<b>Descriptive statistics, frequencies test, percentages</b>	<p>Q1. Is this the first time visiting St. Eustatius?</p> <p>Q2. What is the main purpose of your stay at St. Eustatius?</p> <p>Q4. Did you combine this trip with visits (minimum stay of 1 night) to other Caribbean islands?</p> <p>Q6. At which accommodation are you staying?</p> <p>Q7. Is diving the key activity of your stay at St. Eustatius?</p> <p>Q11. Do you rent your diving equipment or do you have your own diving equipment?</p> <p>Q19. At which scuba diving agency did you receive your certification?</p> <p>Q20. What diving certification or certifications do you have?</p> <p>Q21. How many years of diving experience do you have?</p> <p>Q23. Are you a member of a dive club?</p> <p>Q24. Do you use an underwater camera?</p> <p>Q40. What is your gender?</p> <p>Q41. What is your age?</p> <p>Q42. What is your nationality?</p> <p>Q43. What is the highest level of education you have completed?</p>
<b>Descriptive statistics, descriptives</b>	<p>Q5. What is the total number of overnight stays at St. Eustatius?</p> <p>Q22. How many dives have you completed since you started diving?</p> <p>Q12. What is the total number of dives you plan to take on St. Eustatius?</p>
<b>Multiple response, frequencies test</b>	<p>Q2. With whom are you travelling?</p> <p>Q4a. Please indicate which Caribbean islands.</p> <p>Q8. Have you been or will you be involved in any other activities next to diving?</p> <p>Q10. Where did you hear about this tourist destination?</p> <p>Q18. Can you indicate according to the map which is your favourite dive</p>

	<p>sites on St. Eustatius?</p> <p>Q25. Could you check in what types of diving you have been involved?</p> <p>Q26. In which destinations have you dived before?</p>
<b>Cross tabulation</b>	<ul style="list-style-type: none"> <li>• Is this the first time visiting St. Eustatius? (Q1) &amp; Have you been or will you be involved in any other activities next to diving? (Q8)</li> <li>• Is this the first time visiting St. Eustatius? (Q1) &amp; Did you combine this trip with visits (minimum stay of 1 night) to other Caribbean islands? (Q4)</li> </ul>