



ANNUAL REPORT 2020





Table of Contents

ANNUAL REPORT 2020	1
GENERAL INFORMATION	3
LEGAL STATUS	3
ADDRESS	3
OBJECTIVES	3
BOARD	3
REMUNERATION POLICY	3
ACTIVITIES IN 2020	4
RESEARCH	4
PUBLICATIONS	6
POLICY PLAN 2021	6
INTRODUCTION	6
GOALS	6
ACTIVITIES	7
FUNDING	7
FUTURE ACTIVITIES	8
FINANCIAL INFORMATION	10
FINANCIAL POLICY	10
ACCOUNTING PRINCIPLE	10
BALANCE SHEET	10
INCOME AND EXPENSES	11
NOTES	11
OFF-BALANCE SHEET OBLIGATIONS	14
PROPORTION OF DONATIONS SPENT DIRECTLY ON THE OBJECTIVES	14



**NOVA ATLANTIS
FOUNDATION**

General information

Legal status

Stichting Nova Atlantis (Nova Atlantis Foundation) is a foundation (stichting) under Dutch law. It is registered in the trade register (Kamer van Koophandel) under no. 37101348 and RSIN 812720416. The foundation was established on 4 April 2002.

Address

Dr. Ramaerlaan 5
1901 KV Castricum

<https://nova-atlantis.org>
info@nova-atlantis.org

Objectives

Our goal is the conservation of the coastal and pelagic waters of the Azores. Recognition of these waters as Marine Protected Areas would be a major step towards that goal. We contribute by collecting and providing (long-term) data on marine mammal ecology to stakeholders, such as local authorities, the scientific community, environmental NGOs, and through lobbying. We focus on the cetacean species that are resident or frequent visitors of the Azores. Key species in our behavioural, ecological studies are the resident Risso's dolphins. Educating (biology) students through internships and raising general awareness through social media platforms, presentations at e.g. conferences, films and workshops are all conducive to our overall objective.

Board

During 2020 and at 31 December 2020 the Board composition was as follows:

Liesbeth Feikema (chair)	since 23-02-2016
Taco van der Harst	since 23-02-2016
Karin Hartman	since 04-10-2013
Pieter van der Harst (secretary/treasurer)	since 23-02-2016

Remuneration policy

Nova Atlantis does not have any employees, and does not award any remuneration to its board members, interns, volunteers or anyone else.

Expenses incurred that are directly related to the activities of Nova Atlantis (such as fuel, maintenance and repair, taxes and insurance of the research vessels and car, internet access at the research station, electricity, rental of whale-watch vessels, and necessary travel expenses) are reimbursed. See the section Financial information for more detail.



Activities in 2020

Research

2020 was marked by the Corona crisis. Due to travel restrictions we could not travel to Pico until the end of June. As a result, we missed the normally crucial month of June. To (partly) compensate this, fieldwork continued until the end of October, whereas in previous years that was the end of September / early October. The extra research weeks in October could, however, not compensate for the lack of research activity in June.

We had an extraordinarily motivated and strong team of interns in 2020. As a result, the effort (time spent on research activities) was higher than on average in the past, especially in the hours spent on land.

2020 Land observations	
Observation days	111
No. of crew	2-6
Hours	193
No. of surveys *	554
Surveys with Q7 **	147
No. of species sighted	13
Sightings cetacean pods	1,512
No. of animals sighted	64,920

* A survey lasts for at least 20 minutes

** Q7 indicates days with limited observation conditions like rain, mist, or a sea state above Douglas state 4



2010 Ocean observations	
No. of surveys	70
Surveys with cetacean species	68
Average duration	2h. 32 min.
No. of hours	178
Total km	1,829
Total Groups	206
No. of species	13
No. of animals	7,310

The higher land effort, however, did not translate into a higher number of observations of animals. This was not only due to missing the important research month of June, but also to a significant decrease in the number and the variety of Risso's dolphins sighted. Compared to previous years, we saw mainly a strong repetition of well-known groups of adult males, but fewer sub-adults and far fewer groups of females. During the entire season, we only saw one (unknown) female with a newborn calf- a low point in our long-term research. A highlight was the improved relationship with the *viziers* and skippers of whale-watch companies, as a result of which both parties shared observations that were mutually beneficial.

Whereas the number of observations of Risso's dolphins was disappointing, we saw a remarkable increase in sightings of sperm whales, pilot whales and beaked whales. These are all deep divers who, just like Risso's dolphins, feed on squid. This begs the question if there is any relationship between the observed decrease in Risso's dolphins and the increase of the other deep divers, and what could cause this. This will be investigated in the coming years.

Early 2020 we participated in a competition for a post-doc project of the Max Planck Institute for collaborative international research of behaviour and social structure in group living animals. Although we reached the last round, we did not win the grant. Nevertheless, as a spin-off of our proposal we started in 2020 with experimental acoustic research, in which we recorded the sounds of Risso's dolphins and a few other species under water, and combined it with drone recordings and photo-identification. The ultimate goal is to use more advanced methods to record sounds with multiple hydrophones, so that sounds can be traced back to individuals that are identified using drone recordings and photo-ID. This could address the question if Risso's dolphins, similar to bottlenose dolphins, use signature whistles. It could also yield insights into the use of specific sounds accompanying specific behaviours, which would make it much easier to interpret behaviour in the future.

Our article on a method to study the social structure in groups of male Risso's dolphins using a drone, was published in March 2020. The manuscript has been well received and the number of citations in the first year is encouraging. Apart from that, we spent much time and attention to data curation and analyses and preparations for new publications of our research results.

Notwithstanding the challenges of the Corona crisis, we look back at 2020 with some satisfaction. We are grateful for the effort of our interns, for the donations from our benefactors, and the insights gained during our fieldwork in 2020 motivate us to continue our research with even greater vigour and to publish new results. That is the most important contribution that we can make to the conservation of the unique habitat in the waters around the Azores.

Publications

In 2020 the following (co-)authored publications were published:

- **Hartman, K.L.**, van der Harst, P. and Vilela, R. (2020). Continuous focal group follows operated by a drone enable analysis of the relation between sociality and position in a group of male Risso's dolphins (*Grampus griseus*). *Front. Mar. Sci.* 7:283. <https://doi.org/10.3389/fmars.2020.00283>.

Video abstract: <https://vimeo.com/384551409>

- Dinis A, Molina C, Tobeña M, Sambolino A, **Hartman K**, Fernandez M, Magalhães S, dos Santos RP, Ritter F, Martín V, Aguilar de Soto N, Alves F. (2021). Large scale movements of common bottlenose dolphins in the Atlantic: dolphins with an international courtyard. *PeerJ9*: e11069 <https://doi.org/10.7717/peerj.11069>

Policy Plan 2021

Introduction

Worldwide there are around 90 species of whales and dolphins, of which the Blue whale is the biggest and the Vaquita porpoise the smallest. In the Azores, a volcanic archipelago in the middle of the Atlantic Ocean, Nova Atlantis performs scientific research of whales and dolphins off the south coast of Pico Island. These waters are a unique and rich marine ecosystem in Europe, where more than 25 different species of whales and dolphins have been observed.

Objectives – implementation

Our ultimate goal is the conservation of this ecosystem and all the marine species that live there. A major step in that direction would be the establishment of a Marine Protected Area. This is a long-term goal, which would require agreement at the political level between different stakeholders such as the fishing industry, the tourism sector and nature conservationists. Nova Atlantis is only a small player in this field. However, our scientific research project is unique in its long-term focus, covering 22 consecutive years during which we have collected data in a structured manner on the presence and behaviour of up to 20 species of whales and dolphins around Pico Island. Many of these species are long living animals, whose patterns and behaviours can only be understood if they are followed over a long term. Therefore, scientific publications based on hard data from long-term research projects such as ours are crucial for convincing



political stakeholders and local conservation management of the necessity to protect this part of the Atlantic Ocean.

Activities

We work under research licenses granted by the *Direção Regional dos Assuntos do Mar* of the government in the Autonomous Region of the Azores, which are granted for one year. Our research concerns the ecology of several key species, of which the Risso's dolphin (*Grampus griseus*) is the most important. In the past two decades we have gained detailed insights into the social structure, residency patterns and reproduction strategies / mating season of different species. For nature conservation in the EU it is important to demonstrate that an area can be classified as a 'critical habitat': an area used by a population for daily survival – foraging, resting, mating and nursing. Nova Atlantis promotes awareness of the vulnerable ecosystems in the open ocean by publishing our findings in scientific journals, sharing our data with local stakeholders and policy makers, participation in international conferences, educating young biology students in the field, frequent updates in social media platforms, giving presentations and by distributing our documentary 'Scars', which has won awards in different international nature conservation film festivals.

Our fieldwork season generally runs from May to October, when the conditions for going to sea are mostly favourable. During our fieldwork, we scan the ocean from our research station (at an altitude of some 50 meters), using strong binoculars to detect whale or dolphin species. We perform these scans in a structured manner several times a day, and record the date and time, weather- and sea conditions as well as the species observed, their numbers, position and behaviour. The observers on land guide our boat to the groups at sea. At sea we record the same data in more detail (e.g. GPS position), and in addition also perform photo-identification of as many animals in the group as possible, record the names of individuals spotted, and, depending on the circumstances, we also film underwater using a GoPro actioncam on a pole, and / or employ a drone to film the animals from the air. All the data captured are recorded in spreadsheets for further analysis, which typically takes place between October and May, and which leads to publications in scientific journals. During our fieldwork season, we offer internships to biology students, who play an important role in both the land and sea observation activities, as well as in the input and analysis of data.

Funding

Nova Atlantis has two main funding sources: donations and internship fees. Donations are primarily obtained through our membership of Globe Guards, a platform of small foundations active in nature conservation across the world. The annual Nature Day auction organized by Globe Guards and hosted by Burgers' Zoo, is a major source of donations for Nova Atlantis. Apart from that, we receive incidental donations (e.g. via our website). Internship fees are fees paid by interns to help cover the costs of fieldwork.

Nova Atlantis aims to generate sufficient funding to cover its expenses (which are almost completely related to the cost of fieldwork). Historically, funding has been sufficient to cover running costs, as is clear from the following 5-year overview:



Income and expenses	2020	2019	2018	2017	2016
Donations	€ 4,167	€ 6,000	€ 6,676	€ 5,288	€ 5,012
Internship fees	€ 4,776	€ 3,750	€ 2,250	€ 3,375	€ 4,250
Other income	€ 278	€ 310	€ 150	€ 1,875	€ 653
Total income	€ 9,221	€ 10,060	€ 9,076	€ 10,538	€ 9,915
Total expenses	€ 7,773	€ 9,466	€ 5,251	€ 7,893	€ 10,291
Net result	€ 1,448	€ 594	€ 3,825	€ 2,645	€ -376

The fluctuations in expenses are mainly caused by maintenance and repairs. This expense item concerns a car and two research vessels. The car is a 25-year old pick-up truck (Toyota Hilux). The research vessels are a 6.7 m fiberglass boat ('Moleiro') which has not been in operation since 2014 when both the hull and the engine were damaged, and a secondhand 5.1 m RIB ('Easy'), which has been in operation since 2015. In the past years, we have made expenses on painting and repairing the hull and fixing the engine of the Moleiro, which is expected to be back in operation as from 2022.

Our aim is to maintain a bank balance which is sufficient to cover the expected expenses for the next year. The development of our funding and liquidity position over the last five years is shown in the following table:

Balance sheet	31/12/2020	31/12/2019	31/12/2018	31/12/2017	31/12/2016
Bank	€ 13,102	€ 10,839	€ 9,987	€ 5,316	€ 3,358
Total assets	€ 13,102	€ 10,839	€ 9,987	€ 5,316	€ 3,358
Current account director	€ 5,365	€ 4,549	€ 4,291	€ 3,445	€ 4,133
Total liabilities	€ 5,365	€ 4,549	€ 4,291	€ 3,445	€ 4,133
Equity	€ 7,738	€ 6,290	€ 5,696	€ 1,870	€ -775
Total liabilities and equity	€ 13,102	€ 10,839	€ 9,987	€ 5,316	€ 3,358

Future activities

We aim to continue our research at Pico, which has been running for 22 consecutive years now. In addition, there are new activities that will require funding, and a number of necessary investments regarding our equipment:

- We plan to expand our research with passive acoustic monitoring. Sound is an important communication medium underwater, and for intelligent species such as whales and dolphins, recording and analysing their vocalisations can greatly enhance our understanding of their behaviour and social structure. Total investments in suitable equipment are estimated at € 10,000.



**NOVA ATLANTIS
FOUNDATION**

For this activity, it is essential that the bigger research vessel 'Moleiro' is back in operation, since the smaller vessel 'Easy' is not big enough to store the required equipment.

- The research vessel 'Easy', which was acquired second-hand in 2015, has suffered from six years of uninterrupted exposure to sun, rain, wind and salt, and is up for renewal. The expected investment exceeds our current financial means, and is subject to specific funding.
- Our 25-year old pick-up truck is up for replacement. Expected investment in a suitable second-hand pick-up truck that is powerful enough to tow the 'Moleiro', is beyond our current financial means, and is subject to finding specific funding.
- Our boats and car suffer from being continuously exposed to sun, wind, salt and rain. We intend to create a garage for storage during the winter months, which can serve as an education centre during the fieldwork season. Given the investment involved, this will depend on available specific funding.

Financial information

Financial policy

Nova Atlantis is a foundation without employees, and does not award any remuneration to anyone involved with the foundation. All the work is done by volunteers. Funding consists of donations and fees paid by interns to cover the costs of fieldwork. The donations generated by the annual auction organised by Globe Guards during the 'Dag van de Natuur' ('*Nature Day*') are an important source of funding. Apart from that, Nova Atlantis receives incidental donations from other sources. The research station, the research vessels, the pick-up truck and most of the research equipment are made available for free by Karin Hartman. This is partly due to the complications of putting property, boats or cars in the name of a foundation, and partly because historically the foundation did not dispose of sufficient funding to purchase all the equipment (e.g. binoculars, photo cameras, lenses, drones) itself. If funding is sufficient, Nova Atlantis purchases research equipment on its own account (in the past e.g. a GoPro camera, a video camera, hard disks). Expenses made by Nova Atlantis are predominantly directly related to the objectives of the foundation. Indirect expenses concern bank charges, and the annual contribution to Globe Guards.

Accounting principle

Income and expenses and changes in assets or liabilities are recorded in the year in which they lead to an inflow or outflow on our bank account.

Balance sheet

Amounts in €	31/12/2020	31/12/2019	Note
Bank	13,102	10,839	1
Equipment	0	0	2
Total assets	13,102	10,839	
Current account director	5,365	4,549	3
Total liabilities	5,365	4,549	
Equity	7,738	6,290	4
Total liabilities and equity	13,102	10,839	



Income and expenses

Amounts in €	2020	2019	Note
Donations	4,167	6,000	5
Internship fees	4,776	3,750	6
Other income	278	310	7
Total income	9,221	10,060	
Maintenance and repairs	2,758	3,089	8
Fuel and oil	1,152	1,718	9
Taxes and insurance boats	227	182	
Taxes and insurance car	199	143	
Equipment < € 1.000	469	1,042	10
Depreciation equipment > € 1.000	0	0	
Electricity	268	337	11
Telecom and internet	669	563	12
Office expenses	42	4	
Contribution Globe Guards	250	250	
Travel expenses	1,636	1,666	13
Publication costs	0	0	
Other expenses	0	413	14
Bank charges	105	60	
Total expenses	7,773	9,466	
Net result	1,448	594	

Notes

General: as a result of rounding, some totals may not be equal to the sum of the underlying amounts.

1. Nova Atlantis holds a bank account with bunq BV. Our policy is to maintain a balance at the bank account that is sufficient to make the expenses foreseen for the next year.
2. Equipment concerns investments in excess of € 1,000. During 2019 and 2020 no equipment was purchased by Nova Atlantis that met this criterium.



3. This concerns the debt to K. Hartman, resulting from expenses on account of Nova Atlantis paid by her in private (most notably electricity, and telecom & internet expenses). Up to 2020 the available funding was insufficient to repay this debt, taking into account the minimum desired bank balance described under note 1.

4. The breakdown of equity is as follows:

Amounts in €	31/12/2020	31/12/2019
Paid-in capital	1,000	1,000
Retained earnings	5,290	4,696
Net income	1,448	594
Total equity	7,738	6,290

5. The breakdown of donations is as follows:

Amounts in €	2020	2019
Via Globe Guards	918	5,000
Incidental donations	3,250	1,000
Total donations	4,167	6,000

Due to the Corona crisis, the auction during Nature Day could not be organized in 2020. As a result, the donations via Globe Guards were significantly lower than in 2019. Of the incidental donations, an amount of € 1,900 (2019: € 17) concerns the waiver by board member P. van der Harst of claims arising from expenses (mainly travel expenses) on behalf of Nova Atlantis, paid by him.

6. Internship fees are paid by interns to help cover the costs of fieldwork. In 2020, the internship fees were paid by four interns, covering 9.5 months (2019: three interns and 7.5 months).
7. Other income consisted mostly of distribution fees earned with the documentary film 'Scars'. (2019: sale of t-shirts).

8. The breakdown of Maintenance and repairs is as follows:

Amounts in €	2020	2019
Pick-up truck	785	42
RV Easy	613	400
RV Moleiro	2,145	1,904
Total Maintenance and repairs	3,542	2,346

Nova Atlantis uses a 25-year old pick-up truck (Toyota Hilux) that requires regular maintenance and repairs. There are two research vessels: since 2015, the RV 'Easy' (a 5.10 m RIB) has been in operation. The older 6.70 m fiberglass vessel 'Moleiro' has not been in operation since 2014. It is our intention to bring the Moleiro back into operation again in 2022. The expenses made for the Moleiro in 2020 concerned a downpayment for the revision of the engine (2019: a downpayment for the repainting of the hull).

9. Fuel and oil concerns gasoline and oil for the RV 'Easy' and diesel for the pick-up truck. The decrease in 2020 compared to 2019 is due to a lower fieldwork effort in 2020 as a result of the later start than normal, caused by Covid-19 travel restrictions.
10. Equipment < € 1,000 concerns purchases of items with purchase prices of less than € 1,000. In 2020 this concerned a multi-track recorder and hydrophone for passive acoustic monitoring (2019: a video recorder and external hard drives).
11. Electricity concerns the electricity bills of the research station.
12. Telecom and internet concerns the costs of internet access at the research station and the telecom costs of the local mobile telephone.
13. Travel expenses concerns expenses incurred by K. Hartman and P. van der Harst travelling from Amsterdam to Pico *vice versa*. In 2019 this also included travel expenses incurred by K. Hartman to visit the WMMC conference in Barcelona.
14. Other expenses concerned t-shirts that were printed for the 'Keep on gramping' workshop during the WMMC conference in Barcelona in 2019.



Off-balance sheet obligations

There were no off-balance sheet obligations at year end 2020 and 2019.

Proportion of donations spent directly on the objectives

All of the expenses incurred are in support of the objectives (see page 3). Expenses that could be viewed as 'indirect' – i.e. not directly related to research – are the contribution to Globe Guards and bank charges. Together, these represent 8.5% of donations (2019: 5.2%), and 4.0% of donations + internship fees (2019: 3.2%).