

# 1. The association and the people behind

The fair-fish international association (fair-fish.net) founded in 2010 reports on its seventh business year. The association is designed as an international umbrella organisation and has above all the role of the "Guardian of the Grail". In doing so, it carries out tasks of basic develop- ment, with as little operational and cam- paigning expenditure as possible.

#### 1.1 The board of directors

The association, domiciled in Winterthur, Switzerland, is run by a board of directors, which in the year under review consisted of the four founding members Katrin Vogelbach, Billo Heinzpeter Studer, Irmy Algader, and Nina Lisann Otter, plus Jenny Volstorf and Oliver Seeger.

## 1.2 Management and collaborators

The obligation of the board members is limited to the passing of resolutions and the control of management and finances.

Billo Heinzpeter Studer, as the association's president, is responsible for management, external representation and the management of projects, within the framework of the Rules of Procedure. The collaborators are mentioned in the following project reports.

From August 2018 to May 2019, Billo Heinzpeter Studer was the acting manager of the fair-fish Switzerland association, which delayed the completion of his tasks at fair-fish international.



Katrin Vogelbach, cofounder and member, board member 2010-2017. Urdorf ZH, Designer, \*1936, co-founder and board member of fairfish.ch 2000-2012.



Billo Heinzpeter Studer, founder and president, Monfalcone, social psychologist//publicist, \*1947, founder and 2000-2012 director of fair-fish.ch



Irmy Algader, Co-founder and member, board member 2010-2018.
Grado, photographer and illustrator, \*1966



**Nina Lisann Otter**, cofounder and board member. Los Angles and Paris, mathematican and artist



**Oliver Seeger,** board member. Winterthur, Copresident fair-fish.ch 2008-2018, \*1962



Jenny Volstorf, co-founder and board member. Berlin, PhD in natural sciences, \*1982, research coordinator FishEthoBase

# 2. Appearances

#### 1.3 Guidelines commission

- Peter Jossi, food engineer, certification specialist, Basle
- Peter Schlup, ethologist, Berne
- Billo Heinzpeter Studer No activity in the year under review.

## 1.4 Advisory scientific board

The advisory board so far consisted of three experts in the field of fish welfare/ animal welfare:

Prof. em. Rudolf Hoffmann †, Munich; Prof. em. Detlef Fölsch, Witzenhausen; Prof. Helmut Segner, FIWI, Univ. Bern. In September 2019, our FishEthoGroup elected a new advisory scientific board, which will also act for fair-fish international:

- Prof. Culum Brown, Sidney, Australia
- Prof. Becca Franks, New York, USA
- Prof. Lluis Tort, Barcelona, Spain No activity in the year under review

#### 1.5 Audit

For the first time, the General Meeting elected Kim Suter, WINCO Treuhand AG, Winterhur, as auditor.



#### 2.1 Presentations

- Presentations FishEthoBase: → page 7
- 08.01.2019: Presentation in the webinar by Friend of the Sea "Fish Welfare in Aquaculture"
- 12.09.2019: Summer Shoal in Faro, Portugal → page 7
- 03.10. 2019: Presentation "Which fish do I buy then?", Fish Enquête of the Procurement of the City of Vienna

## 2.2 Meetings and contacts

- Team meetings of all collaborators: 06.-07.04.2019 and 12.09.2019, both in Faro
- Meeting Carefish project: 09.07.2019 in Barcelona
- 2019: second visits and consulting of 51 fish farms → page 4

#### 2.3 Media

- April 2019: Interview on fish and consumption; PS Magazin, Zürich
- April 2019: Contribution to "cod travels the world"; Ostsee-Zeitung
- Mai 2019: Interview on fisheries, aquaculture, and animal welfare; Magazin oliv
- Mai 2019: Interview on plastic waste in the oceans; Der Tierschutz, bv-tierschutz.de
- September 2019: Statement on the conversion of the Kundelfingerhof fish farm; VgT-Nachrichten
- Editorial of facebook.com/fair.fish and facebook.com/fishethobase, contribution to publications by fair-fish.ch

Carp pond from biofisch.at in the Waldviertel (Photo: Studer/fair-fish)

# 3. Fish ethology database "FishEthoBase"

#### 3.1 Goal

The aim is to create a global database that systematically summarises the scattered ethological (i. e. behavioural) findings on fish species and makes them publicly available, as a basis for speciesappropriate fish farming and as a stimulus for further research. The preparatory work started in 2013.

#### 3.2 Achievements in the reporting year

The targeted number of published short and full profiles could not be achieved. On the one hand, we deliberately took more time than planned for the internal review process when creating new profiles. On the other hand, we invested about one third of the budgeted working hours in the complete revision of the existing profiles, initiated by numerous suggestions we received in the stakeholder dialogue in spring 2017. First adjustments had already been made in the previous year.

We decided to prioritize further adjustments before creating many additional profiles, which then would only have to be adapted to the new, higher quality as well. In the case of the short profiles, the main focus was on adapting the entries to an even further revised format, as well as in the revision of the FishEtho-Scores.

The full profiles were given a completely new, dynamic format with an improved overview for the users. The harmonisation of all existing profiles is still in progress.

#### Ethological full profiles

Eleven full profiles were available online at the end of 2019, see the list of species opposite. These are three more than at the end of 2018 and thus one more than planned. The profile of each species consists of a summary and interpretation of the studies found on a variety of ethological and fish welfare criteria (findings, with references), fish welfare recommendations for practitioners based on these, and the short profile with a summary. (The original longer summaries for a wider audience will be published on the new website fair-fish. net at the end of 2020). Based on our experience so far, we currently expect to produce two new full profiles per year.

## Ethological short profiles

At the end of 2019, 46 short profiles had been published online, see the list of species opposite - only four more than at the end of 2018 (reasons: see above and especially on page 10). Each short profile compresses the presentation and interpretation of the studies found into ten core criteria:

- Horizontal need for space (home range)
- Vertical need for space (depth range)
- Migration or habitat change
- Reproduction
- Social behaviour
- Aggression
- Substrate and possibility for retreat
- Stress
- Malformations
- Slaughter

## Table 1: The FishEthoBase profiles in the species tree

Legend: short profile only full and short profile

CEPHALOPODA (CEPHALOPODA)

Octopoda (Octopoda)

Octopodidae (Octopodidae)

Octopus maya (Mexican four eyed octopus)

Octopus vulgaris (Common octopus)

Sepiida (Sepiida)

Sepiidae (Sepiidae)

Sepia officinalis (Common cuttlefish)

MALACOSTRACA (MALACOSTRACA)

<u>Decapoda</u> (Decapods)

Penaeidae (Penaeidae)

**Litopenaeus vannamei** (Pacific whiteleg shrimp)

**Penaeus monodon** (Giant tigerprawn)

OSTEICHTHYES (BONY FISH)

Acipenseriformes (Acipenseriformes)

Acipenseridae (Sturgeons)

**Acipenser baerii** (Siberian sturgeon)

Acipenser queldenstaedtii (Russian sturgeon)

**Acipenser naccarii** (Adriatic sturgeon)

Acipenser ruthenus (Sterlet sturgeon)

Acipenser stellatus (Stellate sturgeon)

Acipenser transmontanus (White sturgeon)

**BAExNAC, NACxBAE** (Hybrid sturgeon)

Cypriniformes (Cypriniformes)

Cyprinidae (Cyprinids)

Ctenopharyngodon idella (Grass carp)

Cyprinus carpio (Common carp)

Gadiformes (Gadiformes)

Gadidae (Codfishes)

Gadus morhua (Atlantic cod)

Lotidae (Lotidae)

Lota lota (Burbot)

Mugiliformes (Mullets)

Mugilidae (Mullets)

Mugil cephalus (Striped mullet)

Perciformes (Perciformes)

Carangidae (Carangidae)

Seriola dumerili (Greater amberjack)

Seriola lalandi (Yellowtail amberjack)

Cichlidae (Cichlids)

Oroeochrmis niloticus (Nile tilapia)

Latidae (Lates perches)

Lates calcarifer (Barramundi)

Moronidae (Temperate basses)

**Dicentrachus labrax** (European seabass)

Osphronemidae (Gouramis)

Osphronemus goramy (Giant gourami)

Percidae (Percidae)

Perca fluviatilis (European perch)

Sander lucioperca (Pikeperch)

Percoidea (Percoidea)

**Dentex dentex** (Common Dentex)

Polyprionidae (Wreckfishes)

**Polyprion americanus** (Wreckfish)

Rachycentridae (Rachycentridae)

Rachycentron canadum (Cobia)

Sciaenidae (Croakers)

Argyrosomus regius (Meagre)

Scombridae (Scombridae)

Thunnus maccoyii (Southern bluefin tuna)

<u>Serranidae (Serranidae)</u>

**Epinephelus malabaricus** (Malabar Grouper)

Sparidae (Sparidae)

**Diplodus puntazzo** (Sharpsnout Seabream)

Pagrus pagrus (Red Porgy)

**Sparus aurata** (Gilthead seabream)

Pleuronectiformes (Flatfishes)

Pleuronectidae (Righteve flounders)

Hippoglossus hippoglossus (Atlantic halibut)

Scophthalmidae (Turbots)

Scophthalmus maximus (Turbot)

Soleidae (True soles)

Solea senegalensis (Senegalese sole)

Solea solea (Dover sole)

Salmoniformes (Salmoniformes)

Salmonidae (Salmonidae)

Oncorhynchus masou (Cherry salmon)

Oncorhynchus mykiss (Rainbow trout)

Salmo salar (Atlantic salmon)

Salvelinus alpinus alpinus (Arctic char)

Salvelinus fontinalis (Brook trout)

**Thymallus thymallus** (Grayling)

Siluriformes (Siluriforms)

Clariidae (Airbreathing catfishes)

**Clarias gariepinus** (African sharptooth catfish)

Pangasiidae (Shark catfishes)

Pangasianodon hypophthalmus (Pangasius)

5

#### The FishEthoScore

The FishEthoScore is an important component of each short profile. In a first step each criterion is individually assessed and given three scores, in the manner of a risk assessment:

- how likely is it that the fish of the species in question will experience fish welfare under normal farming conditions? (Likelihood: high or low)
- how would improved conditions potentially increase fish welfare of the species concerned? (Potential: high, medium, low)
- and how strong and reliable is the knowledge base used for assessing Likelihood and Potential? (Certainty: high, medium, low)

The sum of the three scores in the ten criteria results in the FishEthoScore as the first raw measure for the aquaculture suitability of a fish species.

Each short profile is preceded by a brief summary of the main fish welfare problems in the farming of the species concerned, including suggestions for possible improvements.

Furthermore, the degree of domestication of the species is recorded, as well as the extent to which feed from wild catch can be avoided.

Based on our experience to date, we expect to produce around 25 new short profiles per year once the revision of existing profiles has been completed.

## 3.3 Stakeholder engagement

We actively seek critical engagement with our research at different levels:

## • Stakeholder dialogue

Since the implementation of the numerous suggestions from the dialogue in spring 2017 still kept us busy in the reporting year, we postponed the next dialogue indefinitely, or rather, we continued it at the following events:

## Table 2: Comparison of the FishEthoScores of 2 species

Oreochromis niloticus	Likelihood	Potential	Certainty	Oncorhyn- chus mykiss	Likelihood	Potential	Certainty	Li = Likelihood that the individuals of species experience welfare under material farming conditions.  Po = Potential overall potential of the viduals of the species to experience
1 Home range	?			1 Home range				re under improved farming condition Ce = Certainty of our findings in Like
2 Depth range				2 Depth range				hood and Potential.
3 Migration				3 Migration				High
4 Reproduction				4 Reproduction				High
5 Aggregation	?			5 Aggregation				Medium (not scored in Likelihoo
6 Aggression				6 Aggression				Low
7 Substrate				7 Substrate	?			
8 Stress				8 Stress				? Unclear
9 Malformation				9 Malformation				/ No findings
10 Slaughter				10 Slaughter				FishEthoScore = Sum of criteria so
FishEthoScore	3	8	6	FishEthoScore	0	1	4	"High" (max. 10)



One of the plenary sessions at the Summer Shoal 2019 in Pedras d'el Rey, east of Faro

## Presentation at congresses

We were allowed to present the Fish-EthoBase at the following congresses:

- 06.03.2019, Brussels. Presentation at the Parliament.
- 14.05.2019, Lake Swan (UK): Presentation at the 1st Symposium on Fish Welfare in Aquaculture.
- 11.06.2019, Brussels: Lecture about the FishEthoBase and Carefish (see 4.) at the meeting of the fish welfare projects supported by Open Philanthropy (USA).
- Presentations at our Summer Shoal (see below) and at the 1st Fish Welfare Course (see 4.3).
- 28.11.2019, Freiburg: Keynote at the 51st International Conference on Applied Ethology

## Summer Shoal on Fish Ethology & Welfare

entists and practitioners can focus on fish welfare issues in aquaculture for two full days, we have been organising a Summer Shoal every year since 2017 at the beginning of September. The third edition took place for the first time in the lovely resort of Pedras d'el Rey, east of Faro, with 31 attendants from twelve countries and three continents. The Summer Shoal consists of two full days of oral presentations, without technology, but with a book of scripts on the participants knees, followed by lively discussions in a circle under the pine trees—and many opportunities for further exchange on fish welfare issues in small groups during the breaks. It offers a unique setting for the dialogue between experts with different backgrounds and interests, which promotes

To create an intimate setting where sci-

the cooperation between science, practice, and NGOs, and from which we ourselves also draw great benefit for our own future work.

## 3.4. Institutional safeguard

We had set ourselves the goal early on to establish a longterm institutional basis for the FishEthoBase by the end of 2019 at the latest. We abandoned our first attempt to establish our own institute in Monfalcone at the northernmost beach of the Adriatic and the Mediterranean Sea after we did not find any interest in a cooperation in the two neighboring universities of Trieste and Udine. Instead, we agreed to collaborate with the Centro de Ciências do Mar (CCMAR) of the University of the Algarve in Faro, Portugal in summer 2018. Our collaborator

João Luis Saraiva who—like one of our other collaborators, Maria Filipa Castanheira—had completed his PhD at the CCMAR and was already working there. So, CCMAR hostes our research group, while fair-fish international remains responsible for the payment and supervision of the research work.

In January 2019, we established the Fish Ethology and Welfare Group (FishEtho Group) as an association under European law. The group immediately started its operations in Faro, with João Luis Saraiva as the new team leader, while the founder and previous head of the FishEthoBase, Billo Heinzpeter Studer, continues to work as guarantor.

The FishEthoGroup consists of the previous six collaborators of the FishEthoBase. They support the FishEthoBase and develop further products (see 4). The



Our latest project, which we have been preparing since 2019, will be dedicated to the conservation of the zone between water and land, an important but often threatened habitat for many fish, other aquatic animals and plants. Motto: Marine conservation from the beach, where most people encounter the sea.

Image: Atlantic coast near Pedros d'el Rey, Algarve (Photo: Studer/fair-fish)











Staff, from left: Billo Heinzpeter Studer, I-Monfalcone, president fair-fish and guarantor Fish-EthoGroup; Dr. Jenny Volstorf, D-Berlin, research coordinator FishEthoBase; Dr. João Luis Sara iva, FishEthoGroup, P-Faro; Dr. Maria Filipa Castanheira, researcher FishEthoGroup, E-Barcelona; Dr. Pablo Arechaval-Lopez, researcher FishEthoGroup, E-Palma da Mallorca; and without photo: Sebastian Scholz D-Chemnitz database and website management; tax expert Carlos EthoGroup; Dr. Jenny Volstorf, D-Berlin, research coordinator FishEthoBase; Dr. João Luis Saraiva, FishEthoGroup, P-Faro; Dr. Maria Filipa Castanheira, researcher FishEthoGroup, E-Barcelophoto: Sebastian Scholz, D-Chemnitz, database and website management; tax expert Carlos Lemos, P-Braga; and Dr. Rahel Salathé, fish test editor, CH-Denens.

FishEthoBase remains in the ownership of the fair-fish international association. which guarantees the continuation of the previous research work.

## 3.5 Outlook 2020: Broad Perspectives

#### FishEthoBase

By the end of summer 2020, the harmonisation of the 46 short profiles with the new format should finally be completed. In the process, any differences with the existing full profiles will be eliminated and the latest findings will be integrated. After that, further new short and full profiles will be developed.

## Own experiments

From the beginning, the FishEthoBase was intended as a tool to improve fish welfare in the field. The FishEthoGroup is now increasingly conducting its own experiments to follow up on questions we encounter in our research or consulting. It is using the existing infrastructures of CCMAR in Faro (laboratory) and IMEDEA in Mallorca (laboratory and net cages).

The following experiments could be completed in 2019:

- Extent of tank coverage and its impact on Nile tilapia welfare;
- Environmental enrichment in the husbandry of Gilthead seabream and Sea bass:
- Validation of fish welfare determination by accoustical tracking.

The following experiments are prepared:

- Evaluation of a new thermo-shock stunning method for trout. The method was developed by the aquaculture department of the Mach Institute in Trentino, since the numerous trout farms in this region are skeptical or even hostile to electric stunning and therefore, until today, do not stun their fish at all. The experiment has long been funded, but the Italian authorities only approved it after more than a year in the early summer of 2020.
- Species-appropriate habitat design: A four-year project is to clarify the possibilities for environmental enrichment in the husbandry of Sea bass; funding for the project has not yet been secured.

9

# 4. Carefish project: Fish welfare in practice

The main reason for the slowed production of ethological short profiles is the Carefish project, which we started in early 2018. At its core, this is about putting into practice the knowledge we have gained, a desire that had once led to the establishment of the FishEtho-Base.

## 4.1 Guidelines for Friend of the Sea

The concrete occasion was the request from Friend of the Sea (FOS, Milano), a leading international label for sustainability in fisheries and aquaculture, to develop criteria for fish welfare in farms, and the willingness of Open Philanthropy (USA) to fund the necessary work. The core of our approach was to develop fish welfare quidelines not only theoretically, but based on observational engagement with practice, thus ensuring that the guidelines are achievable, controllable, and relevant to fishes. Three members of our FishEthoGroup were particularly involved in the visits and development of the criteria: João Luis Saraiva, Maria Filipa Castanheira, and Pablo Arechavala-Lopez, i.e. the three collaborators who also developed most of the ethological short profiles. Billo Heinzpeter Studer was responsible for the design, planning, and management of the project.

We are proud of the results<sup>1</sup> of this work:

1 www.fishethobase.net > Evaluation of 51 visits on FOS farms

- We visited 51 FOS-certified farms of 33 companies in the EU, Turkey, Panama and Chile, including their own hatchery or slaughterhouse, where available. In total, we observed the husbandry of 25 fish species.
- During the first visit, we identified a total of 41 different fish welfare problems in these 33 companies and responded to them with 145 recommendations. High severity problems were mainly related to slaughter (73% of the companies), stress (48%) and lack of environmental enrichment (36%). Medium severity problems were mainly related to lack of fish welfare training of the staff (82%) and monitoring of fish welfare indicators (15%).
- At the second round of visits after about six months, 14% of all proposed measures had already been implemented and 29% were being in the planning stage.
- We had made an average of 4.6 recommendations per company during the first visits. On the second visit, the average improvement rate was 2.5. This means that these companies had implemented or were seriously planning to implement more than half of the improvements within six months. Considering the usual transition periods for newly introduced label criteria of one, two or even more years, the adaptation performance of these companies so far signals that an integration of the fish welfare criteria into the Friend of the Sea certification standard is not unrealistic.
- In early 2020, we will hand over the Fish Welfare Criteria and Indicators for



25 fish species to FOS and then accompany the implementation into practice.

## 4.2 Consulting for other companies

From 2020 onwards, FishEthoGroup will also open its consulting services to farms that have other labelling schemes or none at all. The basic costs of this advisory service will be financed from the project budget, while the costs of the farm visits will be financed by the farm itself.

In this way, in addition to contributions from foundations, the FishEthoGroup will gradually create a second economic pillar for itself in the future.

## 4.3 Training, development

Consultancy work to date shows that fish welfare training is lacking on many farms. In addition, there is the practical question of how auditors should assess fish welfare on a farm without the appropriate tools.

In November 2019, we held our first Fish Welfare Course in Faro, which was attended by over 40 persons from academia and field.<sup>1</sup>

Several issues have arisen during our consultancy work, concerning elements for substrate, possibilities of refuge and play, and regarding procedures for humane slaughter. The FishEthoGroup plans to expand its consultation to include these issues in the future.

<sup>&</sup>lt;sup>1</sup> https://ccmar.ualg.pt/advanced-tech-training/fish-welfare-course

## 5. The Fishtest

The fishtest developed by fair-fish international provides purchasing recommendations and background information on 157 fish species.<sup>1</sup>

Unlike conventional fish lists, our fishtest not only assesses the condition of a fish stock, but also the fishing method and its impact on the environment, on the bycatch of other species and on the degree of suffering for the fish caught. In addition to ecological criteria, animal welfare criteria are also assessed. Those who use the fishtest, which is structured like a learning program, learn step by step why the assessment of a particular fish species is "red", "yellow" or "green" and can change from criterion to criterion. In the end, however, the best assessment "light blue" is only achieved by those who eat fish no more than once a month—because even the "greenest" fish will be overfished if everyone pounces on it!

For 2018-2019 we had planned to translate the fish test into English and to add fish from aquaculture. Unfortunately, we had to postpone this project, as both the editor at the time, Janika Lutz, and the president had to step in on an emergency basis at fair-fish Switzerland. Before the end of 2019, marine biologist Rahel Salathé took over the fishtest editorship. The English version is in progress and will go online together with further improvements at the end of 2020.

## 6. Finances → pages 14-15

#### 6.1 The revenues

In the fiscal year 2019 (on which we are reporting in euros for the first time), the association generated a revenue of EUR 95.639, of which EUR 88.774 was destined for the FishEthoBase. In addition. there was the release of EUR 193.142 of the deferred part of the donation from Open Philanthropy from the previous year. Therefore, we had slightly more funds available than in the previous year, if we take into account that the previous fiscal year consisted of 18 months and was closed in Swiss francs. Services for third parties accounted for merely 2% of income (previous year: 3%); this source of income from the pioneering days has become almost insignificant. Booking currency differences contributed 1% to the revenues, so to speak.

## 6.2 The expenditures

Half of the expenditures (previous year: three quarters) served the two main projects Carefish (31%) and FishEthoBase (19%): related to this are the expenditures for outreach (new, 14%, public relations and scientific publications). 11% of the expenditures covered personnel and material costs that cannot be allocated to one of the two main projects, 6% concerned administration and travel costs outside the two main projects (previous year 11%). A very high share (15%) was taken up by personnel costs for tax and legal advice; the costs for the actual accounting and auditing included in this figure are of little significance. The advice of the

<sup>1</sup> www.fair-fish.ch/fischtest

Portuguese expert Carlos Lemos was necessary to develop a structure for the FishEthoGroup, thanks to which the funds donated to us can be used with the lowest possible taxation. This was achieved: but due to the lack of harmonisation of taxes and social security contributions within the EU, it was enormously costly. From the donation of Open Philanthropy, a balance of EUR 45,000 was set aside for the year 2020. The Summer Shoal—being organised by CCMAR on our behalf in 2019 did not result in any costs or revenues on our side.

#### 6.3 Labor cost

In the year under review, fees of EUR 164,625 were paid to the 8 collaborators, at a rate of EUR 30 per hour. With the exception of Rahel Salathé and Billo Heinzpeter Studer, the collaborators received their fees from the FishEthoGroup, which was supported by fair-fish international with subsidies totaling EUR 179,500.

## 6.4 Small annual profit

The annual profit of EUR 2,460 (previous year CHF 706) increases the assets of the association to EUR 18,101.

## 6.5 Voluntary services

The annual accounts do not include about 440 hours of unpaid work, namely:

- 400 hours of the president;
- 40 hours of the board members for file study.

# 7. Acknowledgements

I would like to thank my colleagues on the Board of Directors: Jenny Volstorf, Nina Otter and Oliver Seeger, as well as the members Katrin Vogelbach and Irmy Algader, for their constant support. For the dedicated and fruitful cooperation in the team I thank Jenny Volstorf, João Luis Saraiva, Maria Filipa Castanheira, Pablo Arechavala-Lopez, Sebastian Scholz, Carlos Lemos and Rahel Salathé. A big thank you to all the institutions for their support during the year: Open Philanthropy, the Federal Food Safety and Veterinary Office, and the Dreiklang, Edith Maryon and Effective Altruism foundations. And many thanks to all who use, critically comment on and publicize our work.

> Billo Heinzpeter Studer President fair-fish.net and Guarantor FishEthoGroup Monfalcone, July 15, 2020

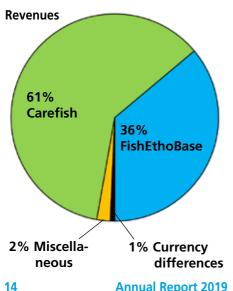
This Annual Report was approved by the General Meeting on August 11, 2020.

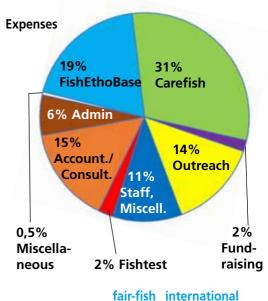
## Balance sheet fair-fish international as at 31.12.2019

Assets	31.12.2019 (EUR)	2017/20	18 (CHF)
Cash + cash equivalents (bank, cash)	69 239	250234	
Receivables			
Debitors	0	1270	
./. Delcredere	0	0	
Other current assets	0	0	
Total current assets	69239	251504	
Fixed assets	0	0	
Total assets	692	39	251 504

Liabilities	31.12.201	9 (EUR)	2017/2	2018 (CHF)
Creditors	2768		6845	
Other liabilities				
Accrued expenses Carefish	43 000		0	
Accrued expenses FishEthoBase	0		9005	
Other accrued expenses	3 9 9 1		0	
Provisions	1379		218000	
Total liabilities		51138		233 850
Association assets as of 31.12.	15641		16949	
Profit for the year	2460		706	
Total shareholders equity		18 101		17 654
Total liabilities		69239		251 504

Review: Kim Suter, WINCO Treuhand Winterhur, 30.06.2020





Annual Report 2019

## Income statement 01.01-31.12.2019

Revenues	2019 (EUR)	2017/2018 (CHF)
Lizence fees	0	2981
Free donations	92	0
Licence fees and free donations	92	2 981
Donations Fishtest	0	0
Donations FishEthoBase	88774	116525
Donations Carefish	150 142	214904
Donations experiments	0	10000
Earmarked donations	238 9 1 6	341 429
Remunerations for services to third parties	2071	4645
Reimbursed expenses for these services	2979	7306
Participation fees Summer Shoal	0	12 103
Interest income	0	0
Total other income	5 0 5 0	24 054
Total revenues	244058	368 464

Expenses	2019 (EUI	R) 2017/2018 (CHF)
Project FishEthoBase	-46731	-131766
Project Carefish	-74240	-145 361
Project Fishtest	-4225	-18138
Campaign Coast protection	-475	_
Outreach, publications	-33796	_
Experiments	0	-7955
Summer Shoal	-224	-16963
Total project expenses incl. staff costs	-1596	91 -320 183
Other staff costs management and team	-25987	_
Protection of name, trade mark, domains	-411	-780
Material costs fundraising, publicity	-5639	-2 559
Otle	22.0	27 220
Other staff and material costs	-320	37 -3 339
Total direct expenses	-320 -1917	
		28 -323 522
Total direct expenses	-1917	28 -323 522
Total direct expenses Gross earnings Share of office rent IT costs (incl. acquisitions and repair)	-1917 523	28 -323 522 30 44 942
Total direct expenses Gross earnings Share of office rent	-1917 523 -3000	28 -323 522 30 44 942 -6 2 3 4
Total direct expenses Gross earnings Share of office rent IT costs (incl. acquisitions and repair)	-1917 523 -3000 -503	28 -323 522 30 44 942 -6 234 -9 444
Total direct expenses Gross earnings Share of office rent IT costs (incl. acquisitions and repair) Other office expenses, membership fees	-1917 523 -3000 -503 -1721	28 -323 522 30 44 942 -6 234 -9 444 -2 759
Total direct expenses Gross earnings Share of office rent IT costs (incl. acquisitions and repair) Other office expenses, membership fees Travel/accomodation costs (not for projects)	-1917 523 -3000 -503 -1721 -9866	28 -323 522 30 44 942 -6234 -9444 -2759 -18716
Total direct expenses Gross earnings Share of office rent IT costs (incl. acquisitions and repair) Other office expenses, membership fees Travel/accomodation costs (not for projects) Accounting, consultancy	-1917 523 -3000 -503 -1721 -9866 -36346	28 -323 522 30 44 942 -6 234 -9 444 -2 759 -18 716 -1 849 -827
Total direct expenses Gross earnings Share of office rent IT costs (incl. acquisitions and repair) Other office expenses, membership fees Travel/accomodation costs (not for projects) Accounting, consultancy Bank account charges Administration costs Operating result	-1917 523 -3000 -503 -1721 -9866 -36346 -159	28 -323 522 30 44 942 -6 234 -9 444 -2 759 -18 716 -1 849 -827 -827 -39 829
Total direct expenses Gross earnings Share of office rent IT costs (incl. acquisitions and repair) Other office expenses, membership fees Travel/accomodation costs (not for projects) Accounting, consultancy Bank account charges Administration costs	-1917 523 -3000 -503 -1721 -9866 -36346 -159 -5159	28 -323 522 30 44 942 -6 234 -9 444 -2 759 -18 716 -1 849 -827 95 -39 829 16 5 112

