



fair-fish international association
Annual report 2020

1. The association and the people behind

The fair-fish international association (fair-fish.net) founded in 2010 reports on its eighth business year. According to its statutes, updated at the beginning of 2021, the association wants to «help animal welfare in fishes achieve an international breakthrough. At the same time, it takes into account the criteria of sustainability and fair trade». Its tasks include, among others, the development of scientific groundwork and of guidelines for fishing and fish-farming.

1.1 Board of directors

The association, with its registered office in Zurich, is managed by an honorary board of directors, which during the financial year consisted of Billo Heinzpeter Studer, Nina Lisann Otter, Oliver Seeger, Jenny Volstorf, Diether Grünenfelder and Rahel Salathé. Other founding members of the association are Katrin Vogelbach, Urdorf (Switzerland) and Irmay Algader, Premariacco (Italy).

1.2 Management and collaborators

The duties of the board members is limited to the passing of resolutions and the control of the management and finances. Billo Heinzpeter Studer, as president of the association, is responsible for the management of the association, its external representation, and the management of projects, within the framework of the rules of procedure. The collaborators are mentioned in the following project reports.



Billo Heinzpeter Studer (1947), founder and president since 2010, Monfalcone (IT), social psychologist, founded and directed fair-fish Switzerland 2000-2012, member FishEthoGroup.



Nina Lisann Otter, co-founder and board member since 2010, Paris, mathematician and artist, founded and directs the research institute DeMos.



Oliver Seeger (1962) board member 2014-2021, St. Gallen, co-president of fair-fish Switzerland 2008-2018.



Dr. Jenny Volstorf (1982), board member since 2016, Berlin, psychologist, chief editor of FishEthoBase, member of the FishEthoGroup.



Diether Grünenfelder (1949), board member since 2020, Zurich, founder and director of EcoSolidar (until 2012, now on its board), accompanied fisheries projects in Sri Lanka and Senegal.



Dr. Rahel Salathé (1976), board member since 2020, Denens (Switzerland), marine biologist, member of the executive board and chief editor of the fish test.

The Fish Ethology and Welfare Group (FishEthoGroup) was created as a spin-off from the work on the FishEthoBase. Since 2019 it has been an independent association based in Portugal and works closely with fair-fish.

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 Beirat

In September 2019, our FishEthoGroup elected a new scientific advisory board, which will also act for fair-fish international:

- Prof. Culum Brown, Sidney, Australia
- Prof. Becca Franks, New York, USA
- Prof. Lluís Tort, Barcelona, Spain

No activity in the year under review.

1.5 Auditing

The General Assembly re-elected Kim Suter, WINCO Treuhand AG, Winterthur, as auditor.

Carlos Lemos (1976), member of FishEthoGroup, Braga (PT), expert in international tax law and accountant of FishEthoGroup.



Dr. João Luis Saraiva (1977), team leader and president of the FishEthoGroup, Olhão (PT), fish ethologist, researcher for FishEthoBase since 2016.



Dr. Maria Filipa Castanheira (1978), FishEthoGroup (until the end of 2020), Barcelona, fish ethologist, researcher for FishEthoBase since 2016.



Dr. Pablo Arechavala-Lopez (1981), FishEthoGroup, Mallorca, fish ethologist, researcher for FishEthoBase since 2016.



Sebastian Scholz (1976), FishEthoGroup, Chemnitz (DE), database and web manager for FishEthoBase since 2016, then later on also for fish test and FishEthoGroup.



Dr. Maria Cabrera (1986), FishEthoGroup since 2020, Faro (PT), fish ethologist.



Dr. Carol Marques Maia (1987), FishEthoGroup since 2020, Botucatu (BR), fish ethologist.

2. Outreach: Our publications and talks

While some areas of our activity fell a little short in 2020, the outreach department, which is responsible for disseminating our knowledge, highly flourished. It did so at least in terms of costs. It got attributed two and a half times its allocated budget, but we think that the result speaks for itself.

The fair-fish story in a book

Six months before her death (†2020), Annette Ringier, long-time friend and sponsor of fair-fish, had the idea, together with her friend and publisher Anne Rüffer, to let the founder of fair-fish describe its twenty-year long history from a personal perspective.¹

Fish welfare in aquaculture

At the invitation of the International Society for Farm Animal Husbandry (IGN), a comprehensive issue of the IGN journal „Nutztierhaltung im Fokus“ (Farm Animal Husbandry in Focus) was produced. It contained contributions from authors around fair-fish on problems and solution approaches for the welfare of farmed fish.²

¹ Billo Heinzpeter Studer (DE 2020, EN 2021): “fair-fish—Because You Shouldn’t Tickle Fishes”, rueffer&rub, Zürich, see: <https://fair-fish.net/en/what/book/>

² Billo Heinzpeter Studer (Ed., DE 2020, EN 2021): “Fish welfare in aquaculture—problems and approaches”. International Society of Livestock Husbandry (IGN), Munich. <https://fair-fish.net/en/what/fish-welfare/aquaculture/> (link in the right column)

Articles (selection)³

- Arechavala-Lopez P et al. Enriched environments enhance cognition, exploratory behaviour and brain physiological functions of *Sparus aurata*. Scientific Reports. 2020;10(1). doi:10.1038/s41598-020-68306-6.
- Arechavala-Lopez P et al. Linking stocking densities and feeding strategies with social and individual stress responses on Gilthead seabream. Physiology & Behavior. 2020;213.
- Muñoz L, Aspillaga E, Palmer M, Saraiva JL, Arechavala-Lopez P. Acoustic Telemetry: A Tool to Monitor Fish Swimming Behavior in Sea-Cage Aquaculture. Frontiers in Marine Science. 2020.
- Gimenez CM, Saraiva JL, Bauer H. The legal protection of farmed fish in Europe—analysing the range of EU legislation and the impact of international animal welfare standards for the fishes in European aquaculture. Derecho Animal. 2020;11(1).
- May and December: Reports about fair-fish in “Tierwelt”, Switzerland’s largest magazine for animal owners.

Talks

- João Saraiva: Fish have minds but who minds the fish? Sciaena webinar cycle on sustainable aquaculture, June 2.
- Pablo Arechavala-Lopez: Escapees and carrying capacity, Sciaena webinar cycle on sustainable aquaculture, Jun 18.

³ Comprehensive list and links: fair-fish.net/en/newsletter/en/november-2020/

- João Saraiva über die FishEthoBase, 2. Oktober, EU Aquaculture Advisory Council
- Aquatic Animal Welfare Conference, Humane League, 1.-4. November:
 - Maria Filipa Castanheira: How to ensure good welfare practices in the aquaculture industry
 - Pablo Arechavala-Lopez: Environ-

- mental Enrichment And Fish Welfare In Aquaculture
- João Saraiva: Driving Mr Tinbergen—Ethology and welfare in fish farming
- Pablo Arechavala-Lopez: Influence of captive environments on fish ethology and welfare, Portuguese Ethological Society Annual Congress, 6. November

Consequences of the pandemic

The Corona pandemic has also hampered our work in 2020. Three of our employees live with partners who also work in research. All three couples, who were confined to the **home office** for a long time, each have a small child who was not allowed to go anywhere during this time; the work of at least one parent therefore had to be shifted to the night. The situation of other employees with partners in the home office was similar. Overall, the whole team worked about 10% fewer hours than budgeted; a corresponding amount will be set aside for next year (→ chapter Finances, page 15). The traditional two **team meetings** per year, where our whole team meets for two days to review achievements and plan the next steps, were cancelled; the last time we had met in person was in September 2019 following the Summer Shoal at Faro. The two long team meetings held online, and the short monthly

meetings, allowed us to exchange ideas, and make the necessary decisions, but the committed spirit of a team of colleagues who have long since become friends thirsts for more, literally: there is no substitute for going out for dinner and drinks together in the evening after a busy day of meetings, and having breakfast together in the morning. It was also difficult for us to have to cancel the **Summer Shoal**, a motivating highlight for us. We couldn’t find a way to present this special, intimate format online—better to do it properly again next year than in an unsatisfactory way now. (We didn’t know at the time that we would have to make the same decision again in 2021, perhaps luckily). The **experiments** planned for 2020, however, were hit the hardest, as their implementation had to be postponed again and again due to the restrictions, and finally had to be set aside until the following year. → Page 10.

3. FishEthoBase: The science of fish welfare

When we started working on the first ethological profiles for the FishEthoBase in 2013, we knew where the journey should lead: our goal was to create a profile for every species kept in aquaculture—about 450 species at the time—but we had no idea how this journey would unfold.

Towards the end of 2015, we visited Rainer Froese, one of the two fathers of the leading fish database FishBase, in his office at the GEOMAR Institute in Kiel. He had encouraged us to tackle the project in 2012; now we wanted to talk to him about what we had achieved so far. One of our goals was to become a partner of FishBase, but our database would have to contain at least a hundred data sets, and we had only published six profiles and needed about half a year for each additional one. “So it will take you another 47 years before the FishBase will accept you”, Froese frowned and suggested that we could reach our goal much more quickly with shorter profiles that were limited to the ten most important ethological criteria.

We followed this advice, and actually managed to make the short profiles of 51 species available online by the end of 2020—that is, of only one tenth of all currently farmed aquatic species... We had to learn that even short profiles are quite time-consuming to compile, both those of species for which there is an exhaustive number of ethological studies, as well as of species with a low density of studies, as a long search is required.

Only a few new profiles

The fact that we were only able to publish five new short profiles in 2020, and that only one new full profile (Cod) was developed, has of course also other reasons, according to our editor-in-chief Jenny Volstorf: because of Corona, she suddenly had to share the home office with her partner, and the departure of

New short profiles 2020

Mangrove red snapper (*Lutjanus argentimaculatus*)

Crimson snapper (*Lutjanus erythropterus*)

John’s snapper (*Lutjanus johnii*)

Felsenbarsch (*Morone saxatilis*)

Forelle (*Salmo trutta*)

Final work on the two profiles of *Sepia officinalis* and *Osphronemus goramy* mentioned in the 2019 report were carried out in 2020.

our long-time colleague Maria Filipa Castanheira caused her considerable extra work in the search for and, above all, in the training of the new colleagues Maria Cabrera and Carol Marques. In the meantime, this team of three (internally “FEB ladies”) and the reviewer Pablo Arechavala-Lopez are working together prolifically.

In addition to increasing maintenance costs for a growing number of profiles, we are now assuming an annual production of at least 20 new short profiles, but we are refraining from further new full profiles for the time being. For the profiles planned for 2020 but not implemented, we are setting aside a corresponding amount for 2021 (→ page 15).

When the renommé increases

The temptations at the periphery of our travel path have also delayed production: invitations for scientific lectures and articles are signs that our work is noticed and appreciated, and of course we answered the call to increase both. The Outreach department, for example, consumed almost twice as much as budgeted, while the expenses for the productive core areas FishEtho-Base, Carefish and Experiments were about a third under budget. Solution: check the budget earlier and more often!

You can find detailed information about the FishEthoBase here:

- in our annual report 2019
- Article “Knowledge as prerequisite for fish welfare—FishEthoBase as a basis” in: “Fish welfare in aquaculture—problems and approaches» (link → page 4)
- www.fishethobase.net

Criteria	Li	Po	Ce
1 Home range			
2 Depth range			
3 Migration			
4 Reproduction			
5 Aggregation	?	?	
6 Aggression	?	?	
7 Substrate			
8 Stress			
9 Malformation	/	/	/
10 Slaughter			
FishEthoScore	0	0	1

Lutjanus johnii

Criteria	Li	Po	Ce
1 Home range			
2 Depth range			
3 Migration	?	?	
4 Reproduction	?	?	
5 Aggregation	?	?	
6 Aggression	/	/	/
7 Substrate			
8 Stress	?	?	
9 Malformation			
10 Slaughter	/	/	/
FishEthoScore	0	0	0

Lutjanus erythropterus

Criteria	Li	Po	Ce
1 Home range			
2 Depth range			
3 Migration			
4 Reproduction			
5 Aggregation	?	?	
6 Aggression	?	?	
7 Substrate			
8 Stress			
9 Malformation	?		
10 Slaughter	?		
FishEthoScore	0	2	3

Lutjanus argentimaculatus

Which fish species are suitable?

The three-digit FishEthoScore resulting from a short profile is a rough measure of the fish welfare of the species concerned under current conditions in aquaculture (Li), of the potential for fish welfare under the best possible conditions (Po) and of the certainty of the findings on which our assessment is based. The comparison of the FishEthoScores of

different species leads to interesting conclusions, such as for which fish species adequate conditions in terms of welfare can be most likely met.

Example: The above comparison of the three Snappers shows that there are questions or gaps in knowledge about group formation and aggressiveness for all three species; overall, the scores are very low.

4. Carefish: Research and training for fish welfare

Our Carefish programme has so far mainly consisted of developing fish welfare guidelines in aquaculture for the international certification scheme Friend of the Sea (FOS). We started the work at the end of 2017 thanks to a contribution of EUR 375,000 from Open Philanthropy (San Francisco, USA).

Practice study 2018-2019

Based on the findings in the FishEthoBase, our researchers visited 51 FOS-certified fish farms from 33 operations in 12 countries (EU, Turkey, Panama, Chile); in total, the behaviour and management of 24 fish species was assessed. During the first visit, we surveyed the fish welfare problems and prepared a report for each farm with suggestions for improvement. During a second visit six months later, we determined which improvements could already be implemented or were under serious consideration - and which were not, and for what reasons. We were able to conclude this study at the end of 2019.¹

Development of FOS guidelines

The follow-up project consisted of determining criteria and indicators for the fish welfare of 24 fish species between 2020 and 2021, based on the field study, so that they could be incorporated by Friend of the Sea into their standard. We handed over the last of the 24 detailed

species documents to FOS in autumn 2020, a little later than planned. After incorporating the criteria and indicators into the FOS standard and following the regulated multi-stage process of standard revision, the FOS fish welfare guidelines became operational in June 2021. The individual requirements are divided into three classes: "mandatory", "important" and "recommended"; most of them belong to the second class, which means that if a non-compliance is identified in the audit, the farmer has one year to rectify it. Based on our study, this is a realistic time limit for measures that are completely new to most farmers. The auditors of the FOS-accredited certification companies will be trained by the FishEthoGroup before end of 2021.

Services for other stakeholders

This follow-up project in 2020-2021 was again funded by Open Philanthropy with EUR 565,000. Of this amount 288,000 was allocated to 2020: 18% for work for FOS, 17% for the development of fish welfare advice for other stakeholders, 14% for experiments, 38% for further work on the FishEthoBase, 5% for outreach and 9% for overhead. As some of the work planned for 2020 has not yet been carried out, we are setting aside a corresponding amount for next year (→ page 15).

The FishEthoGroup wants as many stakeholders as possible to be able to make use of its research, consultation, and training services. The support of Open Philanthropy is the starting capital; increasingly, such services are to be fi-

nanced through sales, in 2024 already by 60%. In 2020, the FishEthoGroup received two initial orders: One was a request from the Aquaculture Stewardship Council (ASC) which asked for help in developing fish welfare criteria, a project also initiated and supported by Open Philanthropy. Another came from the Spanish aquaculture company Culmarex, which asked us and the University of Alicante to work together to assess fish welfare in their facilities and develop indicators for their staff. Income for these services: EUR 7,700, about 4% of FishEthoGroup's annual expenditure—the annual target of EUR 15,000 income was only missed because the second Fish Welfare Course had to be postponed to 2021 due to the pandemic. (The course finally took place with great participation online in February, delayed by Maria Filipa Castanheira's resignation.)

Bridging the gap

The aim of the Carefish programme is to bridge the gap between science and practice:

- with basic and applied research on fish welfare, in cooperation with other researchers and institutes,
- with scientifically based guidelines,
- with the dissemination of the knowledge gained
 - via a FishEthoBase describing as many farmed species as possible,
 - through contacts with national and supranational decision-makers,
 - training courses, on-site consultations and customised solutions,
 - via the organisation of events bringing together science and practice, such as the Summer Shoal.



At the IPMA Institute in Olhão where the FishEthoGroup is welcome to carry out experiments.

5. Experiments: research closes gaps

Several experiments had been planned for 2020:

5.1 Trout stunning

This is about the ethological testing of a new thermal shock stunning method for trout. The method was developed by the aquaculture department of the Mach Institute in Trentino, northern Italy, because the numerous trout farms in the region are sceptical or even opposed to electric stunning and therefore do not stun their fish at all. The experiment has long been financed thanks to contributions from the Edith Maryon (Basel) and Elisabeth Rentschler (Zurich) foundations. But first it took over a year until the approval of the competent authority in Rome arrived in early summer 2020, and at that point it was impossible for our researchers travelling from Portugal in order to carry out the project, due to the pandemic travel restrictions. Funds of EUR 21,200 were therefore carried over to the following year (→ page 15).

5.2 Environmental Enrichment

Our FishEthoGroup is at the forefront of research into species-appropriate habitat design for farmed fish. A four-year research project developed in 2019 aimed to clarify the possibilities for environmental enrichment in the husbandry of Sea bass in the laboratory and in practice, but funding had not yet been secured. However, thanks to a contribution of EUR 24,900 from the Aquatic Life Institute (New York), a part of the project can be tackled—but not until next year.

5.3 Carefish experiments

The Carefish programme supported by Open Philanthropy also includes experiments, two of which were completed in 2020:

- **ActiveBREAM/AccelBREAM:** In close collaboration with Wageningen University and funded by Aqua-Excel2020 and the European Tracking Network Cost Action-STSM (Accel-Bream), we validated transmitters to measure the acceleration of Sea bass. Result: a better understanding of swimming behaviour and the relationship with movement and active metabolic rate of the fish, as well as improved knowledge on the use of the measurement devices in monitoring fish welfare in aquaculture.

- **Tank coverage in tilapia:** What are the ethological and physiological effects of fully, partially or completely uncovered tanks? An experiment on this at the CCMAR in Faro showed how important it is to study the preferences of the animals before changing the living environment in order to avoid undesirable effects or lack of adaptation. Result: full cover has no effect, half cover can increase stress and hence decrease welfare.

Part of the funds for experiments remained unused and will be carried over to 2021.

6. The Fish Test

An old dream has finally come true: the outdated fish test has been reprogrammed and redesigned from scratch, all content has been completely revised and is now available in English as well as in German. We slightly missed the goal of putting the new fish test online at the end of 2020, as the website fair-fish.net (on which the fish test now runs) had to be completely rebuilt. But since spring 2021, the new fish test is online!

The editing (Rahel Salathé) and programming (Sebastian Scholz) efforts were considerably greater than expected, but the result justifies it. As far as we know, the fish test is the only decision-making aid for fish purchases that not only includes the latest studies on fish stocks, but also assesses the fishing method and thus indirectly the extent of fish suffering. Furthermore, the fish test inquires about the frequency of individual fish consumption, which ultimately has an impact on the extent of overfishing and fish suffering. The labour costs (including expenses until early summer 2021) amounted to EUR 23,000, which could be covered thanks to a contribution of CHF 10,000 from the Edith Maryon Foundation and from our reserves.

www.fishtest.net

We have not achieved the goal of extending the fish test to farmed fish by the end of 2020. But this work is in progress. A translation into French and possibly other languages at a later stage is also intended; the database is constructed from text modules in such a way that repetitive modules only have to be translated once, which keeps translation costs low.

Fish test

The screenshot shows the 'Fish test' interface. At the top, it identifies the fish as 'Yellowfin tuna' (Thunnus albacares). Below this, it lists the taxonomy: 'Order: perch-like fishes (Perciformes)' and 'Family: tuna and mackerels (Scombridae)'. A 'Gallery' image shows a tuna swimming. A prominent red box displays the result: 'Result: Absolutely avoid!'. Below the result, there are four input fields with dropdown menus, all showing red error indicators:

- Consumption: about 1x per week
- Fishing method: Longlines (not specified)
- Label: Unknown / None
- Fishing area: Eastern Central Pacific (FAO 77)

Example of a bad fish test result: Stock in the given fishing area is overfished, no label, fishing method harms animals and the environment, fish consumption is more than once a month.

7. Annual Report Team Switzerland

By Dr. Rolf Frischknecht, teamleader Switzerland

After the dissolution of fair-fish Switzerland and its transfer to fair-fish international at the end of May 2020, a number of questions arose regarding the continuation of activities in Switzerland. The decision to temporarily take over the management of fair-fish Switzerland by fair-fish international meant a lot of extra work for the president of fair-fish international. Business and projects that had been started had to be continued. Fortunately, some of the existing staff agreed to continue their involvement in the local core "antenne suisse". In the administrative area, Regula Horner kept up with member services in her usual customer-friendly manner and handled the payment transactions. In October 2020, the fair-fish store room in Winterthur was cleared, sorted and moved to Laupen BE.

7.1 Politics

Politically, we closely monitored developments in the agricultural sector and in fair trade, thanks to the representation of fair-fish by Peter Jossi in the network of the "Agricultural Alliance" and in the "Swiss Fair Trade" federation. In the future, we will become even more involved and will contribute our know-how in animal-friendly fish farming and fair trade. At the same time, we are networking with partner organisations within and outside of the Agricultural Alliance that are concerned with water protection and the impact of the food industry on aquatic life.

fair-fish commented on the Federal Council's counter-proposal to the popular initiative to limit livestock. Apart from praiseworthy improvements in animal welfare for farm animals, essential elements for the welfare of fish were missing. In the consultation on the decree on animal welfare at the time of slaughter, fair-fish once again criticised the absence of shrimps in the animal welfare decree.

7.2 Project work

The lesson modules for the school project were completed by Nina Fehlbaum; unfortunately, the realisation of the planned lessons had to be postponed due to the pandemic. As campaign leader, I was able to move the ornamental fish campaign forward despite pandemic-related delays. The objectives have been agreed on with all partners. However, the "Swiss Animal Protection SAP" association made the transfer of formal leadership to the Federal Food Safety and Veterinary Office a condition for the commitment of campaign funds. This necessitated a public call for tenders for project elements, which delayed progress. In addition to working on the "fish-facts" issues 30 and 31, we actively managed and promoted our Facebook page. The number of subscribers thereby increased to over 1800.

7.3 Phoenix from the ashes

Towards the end of the year, Billo Heinzpeter Studer had various discussions with me and was able to convince me to take over the position as head of Team Switzerland (40%). Team Switzerland will ensure that fair-fish will once again be an audible voice in Switzerland when it comes to fish welfare, fair trade and sustainability in fisheries and aquaculture. The activities for 2021 are already underway: implementation of the ornamental fish campaign, commitment to the two popular initiatives against pesticides and for clean drinking water, and for the CO₂ law on which Switzerland will vote on 13 June 2021, three proposals that are crucial for the fishes in our waters. In addition to contributions to three fish-facts issues, we want to make the Facebook page even more attractive and make greater use of our Twitter channel.

Finances Team Switzerland

As of 1 June 2020, fair-fish international took over a credit balance of CHF 94,600 from the dissolved association fair-fish Switzerland. These assets were achieved thanks to the continued loyalty of members and donors in Switzerland and thanks to low costs, since Billo Heinzpeter Studer temporarily had taken over the management of the association free of charge in the two previous years. The assets could be held until the end of the year—as a basis for activities in Switzerland in 2021. → Page 16: Annual account



Rolf Frischknecht (1959)
Responsibilities: team management, campaigns.
Dr. med. vet, worked for many years at the Federal Food Safety and Veterinary Office, lives in Laupen BE.



Regula Horner (1962)
Responsibilities: administration since 2020, lives in Zurich.



Peter Jossi (1967)
Responsibilities: regulations and quality management, fair trade. Food engineer FH, independent consultant and specialist journalist (www.jossi.bio), lives in Basel..



Nina Fehlbaum (1978)
Responsibilities: school project. Qualified teacher FHNW, biologist MSc, lives in Oberägeri.



Theres Kunz (1954)
Responsibilities: proofreading. Commercial employee and gymnastics teacher, retired two years ago, lives in Dettighofen TG

8. Senegal

Fair trade in fish is the second core area of fair-fish. There is still little evidence of this in practice, despite the example we set in Senegal over ten years ago.¹ We therefore support even the smallest approaches that can help artisanal fishermen to achieve a slightly better economic situation.

In April 2020, a call for help reached us from Senegal: the government was planning to issue a further 52 fishing licences to foreign fishing vessels, mainly Chinese.² The local fishermen, who have often been returning home with empty boats for years due to industrial competition, launched a campaign. fair-fish had funds of EUR 28,914 thanks to donations, of which the lion's share came from Daniel Brunner from Zug. We financed a local team to make a small film on the topic. After the government gave in to the pressure already at the beginning of June, we decided to co-use footage shot for us by the same team in 2018 about emigration due to overfishing³ for a somewhat more detailed film. The film will be released online at the end of summer 2021 in German, French and English versions. We invested EUR 18,387 in filming and production costs in 2020, the rest will be carried over to 2021 (→ page 15). What remains after completion will be used for on-site support.



Excavator combs beach on the Adriatic Sea

9. Marine conservation

The third core area of fair-fish is the protection of the aquatic habitat.¹ In 2020, fair-fish international began initial research for a future "Marine conservation from the beach" campaign.² Idea: For most people, marine conservation is probably something that has to happen far out. The TV image in their minds: actions of bold guys on rubber dinghies in daring confrontations with big fishing vessels. But many people have this image in front of their feet once a year without realising it: the "beautifully" prepared bathing beach on their vacation—the caricature of a natural seashore.

For most people, marine conservation can start right here. Why do we have an image in our heads of industrially straightened bathing beaches which in some cases even need to be filled with imported sand? What is so ugly about a natural beach that we are expected not to enjoy it?

¹ fish-facts issues 24, 25, 33 (in German) www.fair-fish.ch/feedback/mehr-wissen

² fair-fish.net/what/habitat/beach-protection/

10. Finances

Our annual financial statement (→ pages 16-18) has become more complex because it now also includes Team Switzerland following the dissolution of the fair-fish Switzerland association and because considerable project parts extend beyond 2020.

The balance sheet on page 16 is consolidated. Income and expenses, however, are presented separately: international activities on page 17, activities in Switzerland on page 18.

10.1 Revenue

In 2020, fair-fish international received gross donations and contributions of EUR 682,842, of which we set aside a total of EUR 130,746 for the continuation of work in 2021: 56,584 for experiments, 36,930 for the FishEthoBase, 24,074 for Carefish and 13,158 for the Senegal campaign.

In addition, with the takeover of fair-fish Switzerland on June 1st, bank balances of the equivalent of EUR 94,164 (Postfinance Switzerland) and EUR 7,454 (German Postbank) were added. The two accounts are used exclusively for activities of Team Switzerland on-site and in Germany. The Team Switzerland account had increased by EUR 4,088 by the end of 2020 (see page 18) and the German account had increased by donations of EUR 260.

10.2 Expenditure

The FishEthoGroup received a subsidy of EUR 180,000 from fair-fish international in 2020 to cover its labour compensation in the areas of FishEthoBase, Carefish, experiments, outreach and overhead (ad-

ministration, management). The labour costs of fair-fish international for these areas and the fish test amounted to EUR 34,921. The invoiced working hours of fair-fish (without Team Switzerland) and the FishEthoGroup are distributed as follows: 19% FishEthoBase, 26% Carefish, 5% experiments, 22% outreach, 1% fish test, 27% overhead.

All staff members receive the same hourly rate: 20 Euros in the first year, 25 in the second, 30 from the third and 35 Euros from the sixth year. (For staff in Switzerland, the gross rate is CHF 50 per hour due to much higher living costs).

10.3 Profit

The annual profit of EUR 320,303 is eye-catching. It provides us with assets that are slightly greater than our current annual expenditure. For the first time in our more than twenty-year history, we have a solid reserve. However, it is likely to be partly used up in the following year, because future income is expected to be significantly lower.

The rapid growth of the association's assets is the result of high donations, allowing us to transfer the subsidy to the FishEthoGroup (EUR 240,000) due for 2021 before the end of 2020, and from the takeover of two bank accounts from fair-fish Switzerland (EUR 101,618). We owe our good situation to highly qualified and very motivated staff—despite rather modest remuneration—and the great trust of foundations in our work.

¹ fair-fish.net/where/senegal/fishery-project/

² fair-fish.ch/aktuell/senegal/en/

³ fish-facts issues 26-29 (in German) www.fair-fish.ch/feedback/mehr-wissen

Balance sheet fair-fish international association as at 31.12.2020 (consolidated, including Team Switzerland)

Assets	31.12.2020 (EUR)	2019 (EUR)
Cash + cash equivalents		
– Postfinance accounts in CHF and EUR	233 680	69 239
– Postfinance account Team Switzl.	94 164	0
– Postbank account, Germany	7 454	0
Receivables		
– Debtors	1 644	0
Accrued income		
– Subsidies for FishEthoGroup 2021	240 000	0
Total curren assets	576 942	69 239
Fixed assets	0	0
Total assets	576 942	69 239
Liabilities	31.12.2020 (EUR)	2019 (EUR)
Kreditoren	4 796	2 768
Other liabilities		
– Accrued expenses FishEthoBase	36 930	0
– Accrued expenses Carefish	24 074	43 000
– Accrued expenses Experimente	56 584	0
– Accrued exp. Senegal fisheries camp.	13 158	0
– Accrued expenses members Switzl.	3 135	0
– Accrued expenses subscribers Switzl.	512	0
– Furthr accrued expenses	0	3 991
Langfristige Verbindlichkeiten		
– Fund Germany	7 454	0
– Provisions	4 645	1 379
Total liabilities	151 288	51 138
Association assets	102 267	15 641
Profit carried forward	3 085	625
Profi for the year	320 303	2 460
Total equity	425 564	17 654
Total liabilities	576 942	251 504

Review: WINCO Treuhand, Winterhur, 14.09.2021

Financial statement 01.01–31.12.2020, internationaler part

Revenue	2020 (EUR)	2019 (EUR)
Bequests	5 266	0
Free donations	87	92
Bequests and free donations	5 353	92
Donations Fish Test	9 221	0
Donations FishEthoBase	197 476	88 774
Donations Carefish	218 726	150 142
Donations Experimente	56 290	0
Donations Outreach	31 097	0
Donations Senegal fisheries campaign	15 755	0
Earmarked donations	528 565	238 916
Remunerations for services to third parties	12 248	2 071
Reimbursed expenses for these services	323	2 979
Donations Overhead	51 364	0
Total other income	63 935	5 050
Total revenue	597 853	244 058
Expenditure	2020 (EUR)	2019 (EUR)
Project Fish Test	-16 293	-4 225
Project FishEthoBase	-71 972	-46 731
Project Carefish	-67 199	-74 240
Experiments	-24 850	0
Outreach	-32 404	-33 796
Senegal fisheries campaign	-18 387	0
Total project expenses incl. staff costs	-231 107	-158 992
Other staff costs management and team	-18 662	-26 686
Protection of name, trade mark, domains	-8 847	-411
Material costs fundraising, publicity	2 199	-5 639
Other staff and material costs	-29 702	-32 736
Share of office rent	-3 000	-3 000
IT costs (incl. acquisitions and repair)	-5 724	-503
Other office expenses, membership fees	-5 253	-1 721
Travel/accomodation costs (not for projects)	-5 744	-9 866
Accounting, consultancy	-2 253	-36 346
Bank account charges	-339	-159
Administration costs	-22 313	-51 595
Operating result	314 732	736
Currency differences	1 801	1 724
Annual profit	316 533	2 460

Financial statement 01.06–31.12.2020, Swiss part

Revenue	2020 (CHF)
Supporting member fees	2 000
Free donations	48 580
Donations school project	260
Donations ornamental fish campaign	30
Subscriptions fish-facts	415
Total revenue	51 285
Expenditure	2020 (CHF)
Association costs	-954
Information costs (fish-facts)	-12 188
Website and social media costs	-324
Administration costs	-100
New address data base	-6 200
Salaries incl. social security	-15 455
Remunerations	-11 057
Store room rent	-740
Bank account charges	-180
Total expenditure	-47 197 (rounding error)
Annual profit	4 088

Comments

New start on 1 June 2020

For the time before the dissolution of the association fair-fish Switzerland, there was no longer proper bookkeeping. The responsible persons had left their task overnight at the beginning of March 2020, without a proper handover. An annual financial statement for 2019 was missing, as was orderly bookkeeping from January 2020. Therefore, the management of fair-fish international decided to restart the bookkeeping of Team Switzerland from 1 June 2020 (takeover), with the balance of the former account of fair-fish Switzerland as starting capital.

Without project cost accounting

At fair-fish, we usually allocate wage and fee expenses to the individual projects, based on precisely kept hourly reports. In this way, we create better transparency about the effective use of the funds entrusted to us. For 2020, such a distribution would not have made sense, as Team Switzerland was almost exclusively occupied with its development and with clarifying possible projects. For 2021, we will again file accounts as usual.

11. Outlook and acknowledgments

The FishEthoBase and the resulting Carefish projects in research and consultation for the welfare of farmed fish are gaining noticeable attention in science and practice. Compared to the modest beginnings in 2013, this is an unexpectedly rapid and great success of which we can be proud. The FishEthoBase will continue to grow in breadth and depth, and the number of Carefish services to practitioners will increase, as will the number of publications by our researchers. In aquaculture, fair-fish and FishEthoGroup have become safe values for the welfare of fish.

But what about the fish caught in the seas, lakes and rivers? This will exactly be the subject of a multi-year research project that we will be launching in 2021. The goal: to develop guidelines for fisheries to keep animal suffering as low and short as possible. Finally, Team Switzerland will campaign for more consideration for ornamental fish. Our newsletters¹ und websites¹ will report on our progress in these projects. Those who register for the free newsletter will receive news in German about ten times a year or international news in English about three times a year.

2020 was a somewhat special year for fair-fish. First we had to readjust our within-team working conditions to the pandemic imposed restrictions, then we had to transfer the twenty-year history of fair-fish Switzerland into a new structure, and finally we had to replace Maria Filipa Castanheira who, after more than four years of valuable cooperation, decided to work for her second employer in order to reduce her workload. But we did it, and we are doing really well. Many thanks to my colleagues from the fair-fish international team and board, to the FishEthoGroup and Team Switzerland for what we have achieved together! And a big thank you to all those who have supported our work: Open Philanthropy, Stiftung Dreiklang, Edith Maryon Stiftung, Effective Altruism, Aquatic Life Institute - and to all the people who, with their donations, some of them for years, have helped us to be able to work at all!

Monfalcone, 15 September 2021



Billo Heinpeter Studer
President fair-fish international

This annual report was approved by the General Assembly on 11 October 2021.

¹ Englisch: fair-fish.net/en/newsletter –
German: fair-fish.net/de/newsletter
fair-fish.net · fishethogroup.net · fair-fish.ch



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(Foto: Studer/fair-fish)*