



Annual report 2021

Ornithological Society of Polynesia



A message from our president



I am delighted to share with you this annual report, which allows us to communicate on our current actions of our NGO Manu. Thank you to our members, volunteers, partners, sponsors as well as the French Polynesian Government. This year 2021 has been a difficult second year, and it took even more effort to organize and fund actions for the most endangered birds. The cancellation of certain fieldwork trips and the reduction of international contributions, in particular those of certain zoos, have been the main impacts of the pandemic.

We are counting on you to carry out priority actions! I want to draw your attention on the critical situation of the Fatu Hiva Monarch, of which there are only 4 pairs left in the world. We also just found out this year that these birds have avian malaria. With Manu's partner zoos, we believe that it is still possible to save the species, with an egg collection and captive breeding program, and we have just started out looking for funding, with the help of UNIVET Nature:

<https://www.helloasso.com/associations/univet%20nature/collectes/sauvons-le-monarque-de-fatu-hiva>

Our website also hosts a secure payment platform to receive donations or memberships. Enjoy your reading and again, big thanks to all our sponsors.

Roberto Luta, SOP Manu president

Tuamotu lorikeet

Ornithological Society of
Polynesia
Email: sop@manu.pf
Website: www.manu.pf
Facebook: Manu-SOP
Address: Mitirapa,
Toahotu, BP 7023 - 98719
Taravao - Tahiti - French
Polynesia
+(689) 40 52 11 00
SOS Petrels: +(689) 87 222
799



To donate or join : <https://www.manu.pf/produit/don/?lang=en>



Created in 1990, the Ornithological Society of Polynesia- MANU works for the protection and study of birds indigenous to French Polynesia. Actions to safeguard endangered birds constitute the major part of its activity. Our objective: to control the impact of threats, as to avoid the extinction of any one of the 21 species of birds currently threatened worldwide. The team is made up of 8 employees, including 3 in the Marquesas Islands, and are assisted by several service providers, such as subsidized jobs or European Corps Volunteers. Our aim is the "Zero Extinction" strategy, a view shared with the French Polynesian government. Manu has been a partner of BirdLife International, the federation of ornithological NGOs, since 2010.

See our presentation video: <https://youtu.be/luejhzPryNU>

The threatened birds of the 'Fenua'

10 Critically Endangered Species

9 Endangered Species, including 2 seabirds

13 Vulnerable Species

Conservation actions in all the archipelagos



Fatu Hiva Monarch

The Fatu Hiva Monarch (*Pomarea whitneyi*), or 'Oma'o ke'e ke'e, is the most endangered species in French Polynesia and France. The population is very small: less than twenty individuals for 4 breeding pairs.

It used to be very widespread on the island, but the arrival of the black rat has signed its death warrant. Five other species of monarchs in Polynesia went extinct in the 19th and 20th centuries.

In 2021, the fight against feral cats and rats is no longer enough to save the species and the recent detection of bird disease is now at the heart of its conservation issues.





18

Individuals
counted

60

Camera-traps
to monitor
fledgling

+1000

Observations
hours



THOMAS GHESTEMME
Director & Project
Manager



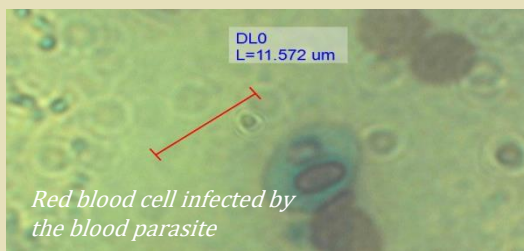
MARÍA IGUAL BELTRÁN
Staff member, bird
monitoring



BENJAMIN IGNACE
Staff member, invasive
species monitoring

A new enemy...

Following the discovery in recent years of several dead juveniles on the ground without signs of predation, research was undertaken by the SOP in partnership with experts. Unfortunately, a new threat has been added to the list: avian malaria. This parasite, transmitted to birds by the bite of mosquitoes, decreases juvenile survival and may explain why the population have not increased despite conservation efforts.



Conservation actions for the Fatu Hiva Monarch

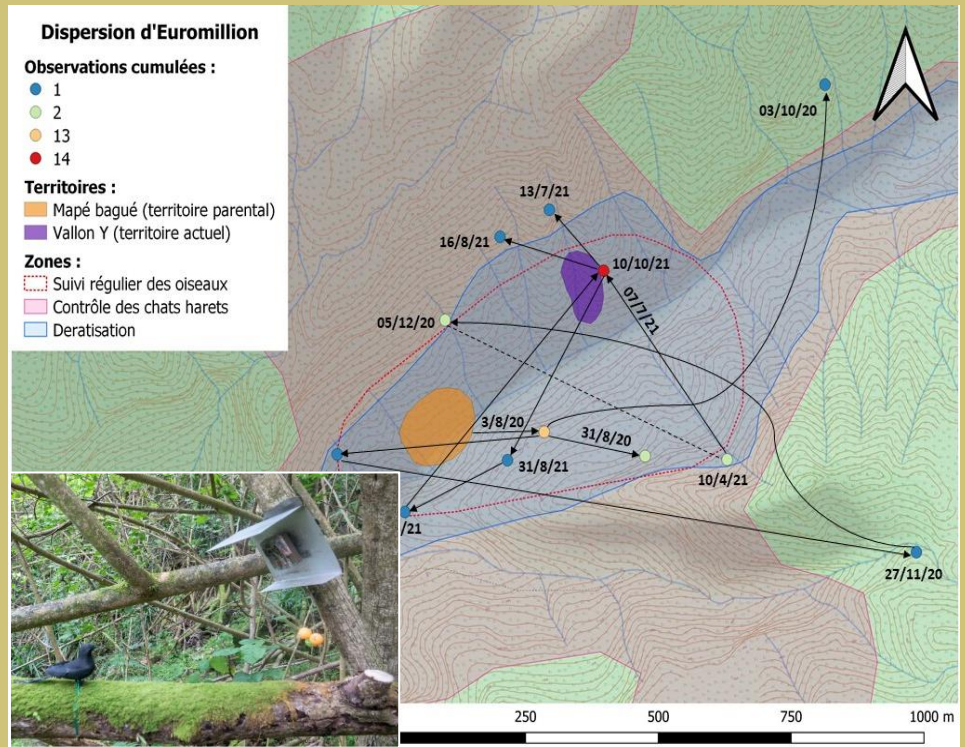
For the second consecutive year, only 2 juveniles reached the age of 2 months out of 6 chicks born, despite the increase of predator monitoring and control. These results suggest other causes of mortality, such as malaria, which could have affected juveniles.

With the recruitment on a permanent staff member, Manuera Terorohaupepa, resident of Fatu Hiva, a team of 3 Marquesan employees fights daily against invasive species. The program also relies on the almost annual presence of 4 biologists in charge of monitoring individuals and maintaining the recent camera network to monitor the dispersal of juveniles and improve our knowledge of their emancipation. This system is possible thanks to the financial support of the French Office for Biodiversity (OFB), the government of French Polynesia and the Disney Foundation.

Funding in 2021 : French Polynesia government via the DIREN, Victoria Zoos (Australia), ZGAP (Germany), Fatu Hiva Town hall, Auckland Zoo (NZ), European union (CES), OFB, STIFTUNG ARTENSCHUTZ (German Zoo), UNIVET Nature, The Thin Green Line Foundation, Disney Foundation, Zoos & Aquariums of Australia, Mohamed Bin Zayed Fund, et private donators. Our thanks to our individual sponsors in 2021: J. VERNAUDON, L. CHAILLOT, C. SAUVIN, G. & F. STEIMER, C. LE THANH, C. PEREZ, et P. & C. GIRARD.

Monitoring of juveniles dispersion

A network of cameras deployed in trees and equipped with attractive lures was developed by the team and set up in Fatu Hiva to study the dispersal of young monarchs in order to identify their movements. A total of 60 automatic cameras, covering more than 350 ha, were placed in the Omoa valley and surrounding valleys. This device, very promising and relatively inexpensive in human time, has made it possible to collect more than 600 videos of monarchs.



Juvenile

The recorded videos made it possible to precisely follow the dispersion of the two young products in the year 2021, where only occasional observations were made with binoculars by the field team. These birds have been observed by more than 10 different cameras and even though they are not banded, individual recognition was possible with the appearance of the first feathers a year and a month after the birth of the individual nicknamed "Euromillion". These observations show that the juveniles did not leave the valley immediately as the visual observations led to believe, but that they prospected the surrounding valleys while carrying out distant prospectations, at times even outside the protected area, before settling near the current Monarch breeding grounds. The camera network also made it possible to show that non-breeding adults and sub-adults, which were supposed to stay in the same areas, also explored unprotected areas.

Monarque de Tahiti



The rescue of the 'Ōmāma'o (*Pomarea nigra*) continues to be a success, thanks to the increasing involvement of the Tahitian community: landowners, trappers of introduced birds and "gardeners" mobilized to get him out of this desperate situation of 1998 when only 12 individuals were known. Managing all threats since 2016 has been key to successfully backing it up. The species now has 125 adult individuals, including 55 pairs: 24 of them reproduced in 2021.

Conservation actions for the Tahiti Monarch



CAROLINE BLAVILLAIN
Terrestrial birds project manager

Actions on the 4 most threatened plant species in Monarch habitat have continued.

In order to prevent the Monarchs from returning to their former habitat, the operational plan, written with the help of 10 international experts, helped us plan the transfer of several young chicks shortly after their emancipation. The host valley was prepared and the transfer of the first 4 birds took place in early 2022 in good conditions.

The progression of 'ōmāma'o numbers continues, with 125 adults and 16 fledglings successfully flying off the nest for this 2021-2022 season (far from the record of 29 juveniles in 2019). The population increased by 19% compared to the previous year.

2021 allowed us to prepare a translocation operation to strengthen the small subpopulation of Hopa valley (7 individuals), which were highly inbred.



125 observed adults



16 chicks fledged



202 plants planted



Miconia invasive plant control



Funding in 2021 : French Polynesia government via the DIREN, OFB, OPT Group, Yune Tung, Victoria Zoo, Franklinia Foundation, la T.E.P, l'Union Européenne (CES) et private donators. Big thanks to individual sponsors 2021 : B. PEACELLIER, Aito Rando, C. LEVY, D&R KOENIG, Parfumerie TIKI, C. SAUVIN, R. CASIMIR et C. CHAVEROCHE.

Saving the 'omama'o from

Little

Fire

Ant



Control via UAV (drone) against Little Fire Ant (*Wasmannia auropunctata*) colonies were carried out on 50.5 ha of forest, including a very threatening colony detected in April 2021. It was found less than 50 meters from the Monarch population in Maruapo (see picture)! The drone treatment of the Maruapo cliff in 2017 is a success because no LFA found yet! Urban areas control continued (at the edge of the forest), awareness signs were put in place and fridge magnets were distributed to help people detect LFA and limit re-infestations.

In 2022, it will be time to report on this program: especially on the areas treated in forests, and in the urban areas (houses that were infested along the Maruapo River).



Protection of Rapa & islets restoration project



TEHANI WITHERS
Island restoration
Project Manager

Actions carried out in 2021, in collaboration with the Raumatariki local NGO:

- Monitoring of seabird colonies on the motu (islets) in June 2021.
- Installation of new GPS transmitters (donated by Paris Museum) on 3 Rapa Shearwater, but no recovery of those from 2019.
- Sharing information with the Rapa community on rat eradicaton and biosecurity project on the island.
- The Council of Elders (Toohitu) has given its approval for the rat eradication project on the 3 invaded motu of Rapa.
- Organization and logistics for the rat eradication project scheduled for November 2022.
- Launch of the habitat restoration project of the motu Tarakoi (already 1500 potted plants) with the help of trained Raumatariki staff.

Puffin de Rapa



Ua Huka island Biosecurity

The year in Ua Huka started by the arrival of the dog Pip and the succession of 4 dog handlers. A counting of ultramarine Lorikeet took place and the population was estimated at 1787 individuals. An action plan for safeguarding the Ultramarine Lorikeet and a logical framework for the selection of favorable islands, as to create a second safety population have been drafted.

Funding in 2021 : Loro Parque Fundacion, French Polynesian gov. via DIREN ; Ua Huka Town Hall et local NGO Vaiku'a



Pihiti or Ultramarine Lorikeet



'Ura or Rimatara Lorikeet



Rimatara Biosecurity

In Rimatara, the year 2021 started with the arrival of the dog Koha, to prevent the invasion of the black rat on the island. An incursion took place (a mouse) in 2021. The SOP helped the local NGO Rima'ura in the census of endemic birds and the monitoring of nests. The population of Rimatara Lorikeet has been estimated at 525 individuals, numbers that have been declining for several years. 11 nests were equipped with camera-traps to further understand this decrease.

Funding in 2021 : The French Polynesian gov. via the DIREN ; Rima'ura NGO/OFB



Petrels, seabirds and others rescue program

Once again this year, SOP Manu successfully completed its seabird rescue campaign thanks to volunteers. Thanks a lot to them ! 5 seabird rescue workshops also took place as part of the project to revitalize the network of volunteers. Data collected and reported to the office and number of birds successfully released:

- 173 Tahiti Petrels (compared to 230 in 2020 and 331 in 2019): decrease related to La Niña? To study the phenomenon in 2022...
- 21 Tropical Shearwaters
- 83 other birds (Noddies, Crested Terns, White Terns, Tropicbirds, Boobies, Fruit Doves, etc.)

Funding in 2021 : Tikehau Pearl Beach Resort, DIREN, FDVA et some individual sponsors.



White-tailed Tropicbird chick



Tahiti Petrel Juvenile

Other projects of 2021

- 3-year study of seabird victims of bycatch by Polynesian fishing boats and staff training (Marine Resources Department).
- Collaboration with the Ihiheiora NGO of Rangiroa to assess the presence of rats on the motu hosting the Tuamotu Lorikeet.
- Continuation of Red-vented Bulbul eradication projects in Ua Pou and Raivavae.

2022 Current Projects...



Monarch of Fatu Hiva:

This will be a crucial year for this species with the actions drafted to fight against avian malaria, namely :

- 1) Understand the disease, how it spread and its vector
- 2) Trap mosquitoes around active nests to hopefully decrease the infection rate among chicks
- 3) Complementary feeding of juveniles before emancipation using feeders (see opposite).
- 4) Evaluate options for prophylactic treatment of birds.
- 5) Start egg collection and hand rearing in captivity with the agreement of the Government
- 6) Exploration of long-term solutions to limit the impact of avian malaria.

Tahiti striated heron: A Master 2 internship took place, in partnership with the University of FP (J. Taugourdeau), on the rearing time after fledging, essential elements for the future translocation project in Raiatea. A video: <https://youtu.be/4iObHzsXiE> and a FB page (Te 'Ao) was created so that inhabitants in Tahiti can relay their observations, request information and help MANU communicate and increase the 'Ao habitat preserved by private owners



A rat eradication project on **Kamaka islet** (Gambier) by drone has been planned for May 2022 (50 ha) – in partnership with Island Conservation and ENVICO.

Ua Pou islets (50 ha): rat eradication project by drone of the 3 motu is being planned for September 2022 (with BirdLife International, PROTEGE funding from the European Union). At least 2 preliminary trips to communicate and prepare the logistics was conducted.

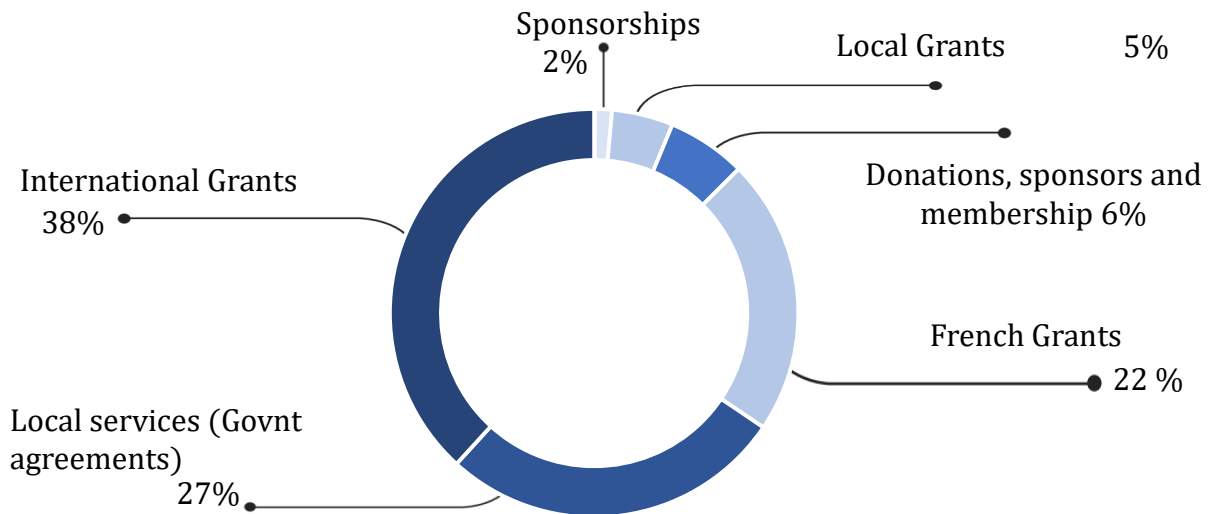
Rapa islets: Continuation of the study of the Rapa Shearwater planned for July 2022, as well as the logistical preparation, communication efforts with the local community for the eradication by drone of the 3 motu (30 ha) planned in 2022 (with BirdLife International).

Finances in 2021

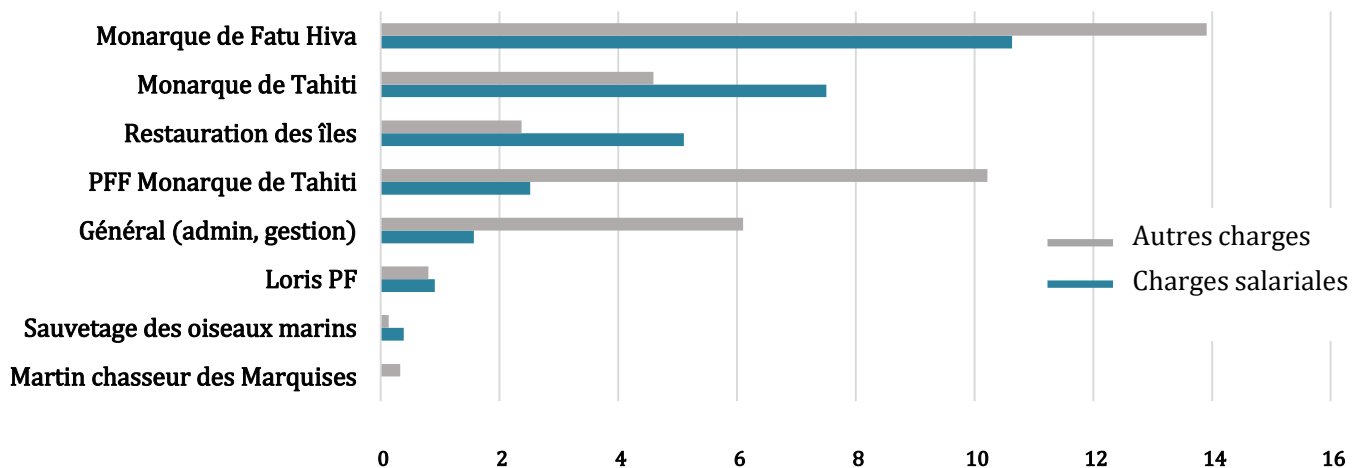


The 2021 budget amounted to 66 MXPF (approx. 660 kUSD) an increase of 11 MXPF compared to 2020), with a profit for the year of 390,052 FCFP (approx 3900 USD)

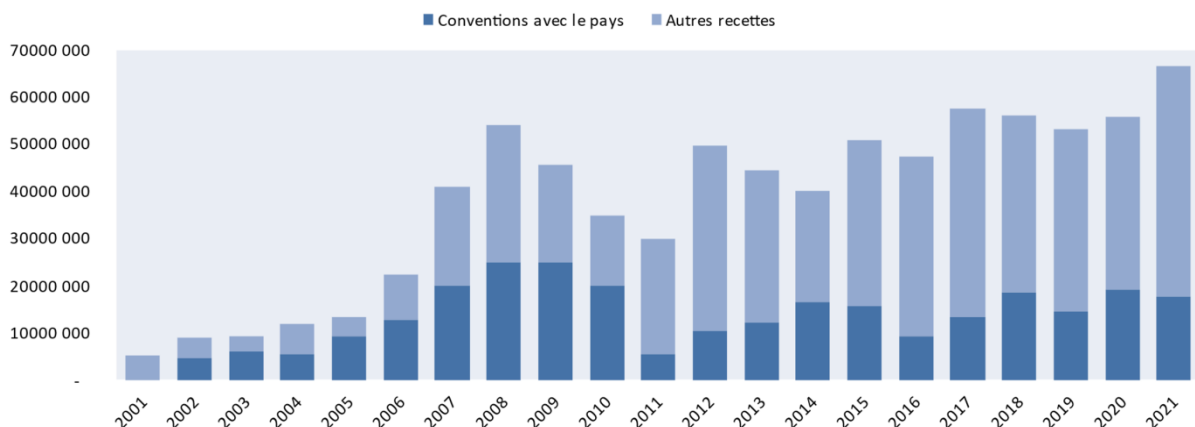
• Income details in 2021 :



• Expenditure details in 2021 by project (in MXPF) :



• Evolution of Manu's funding for 20 years, and separated amount of funding from the French Polynesian Government (in XPF):



Informations from official report of Annual meeting of SOP Manu, 2nd of April 2022.

Thanks to our 2021 funders!!



Many thanks to all private donors!

Thanks to the photographers that have contributed beautiful pictures for this annual report:
B. Ignace, T. Withers, D. Koenig, F. Jacq, Moana Iti et M. Igual

