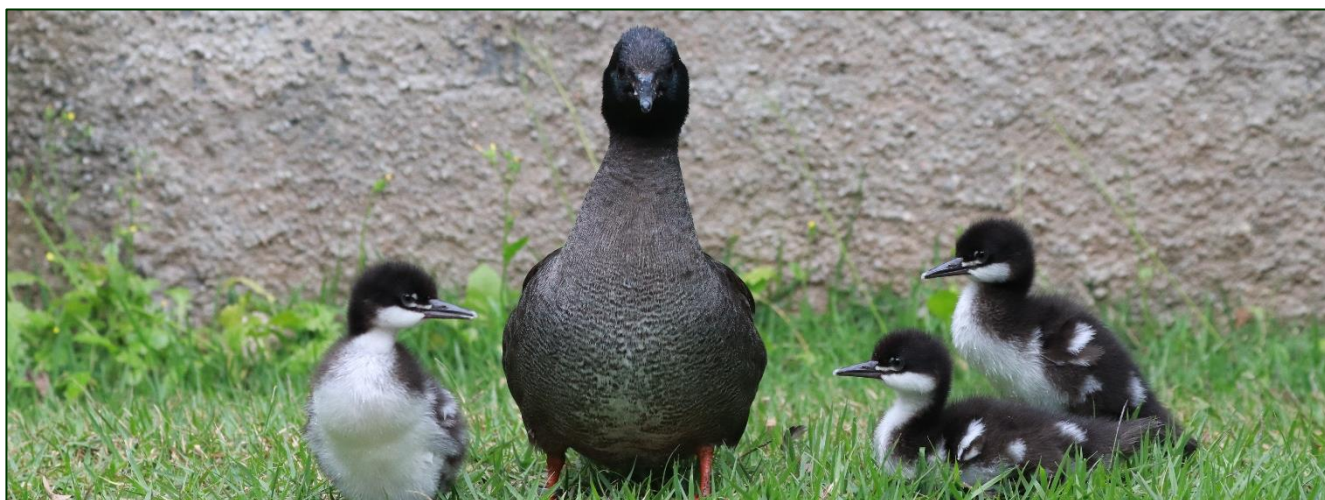




Brazilian Merganser (*Mergus octosetaceus*)

Update March 2023

The year 2022 was very successful for the Brazilian Merganser Project and we'd like to send this update to our sponsors.



Breeding season

Last year's breeding season was a huge success; we celebrated the hatch of 22 ducklings. This was the highest number of ducklings we ever had. We believe these results show that the reproduction program is working and gives us high hopes for reaching the number of individuals we need to start the reintroduction in the future.

Through the partnership between Zooparque Itatiba and ICMBio (Ministry of Environment), we were able to collect eggs from Chapada dos Veadeiros, in the state of Goiás. When the eggs arrived at zoo, they were almost ready to hatch, so they needed to be hand reared, but the ducklings developed very quickly and healthy.

In addition, 2022 was the first year we could celebrate the hatching and successful parent raising of eight ducklings from one clutch. This amazing result outnumbers the results we had in 2020, which was seven duckling from one clutch.



Hatch 14/07/2022



Hatch 25/07/2022



Hatch 03/08/2022



Hatch 22/08/2022



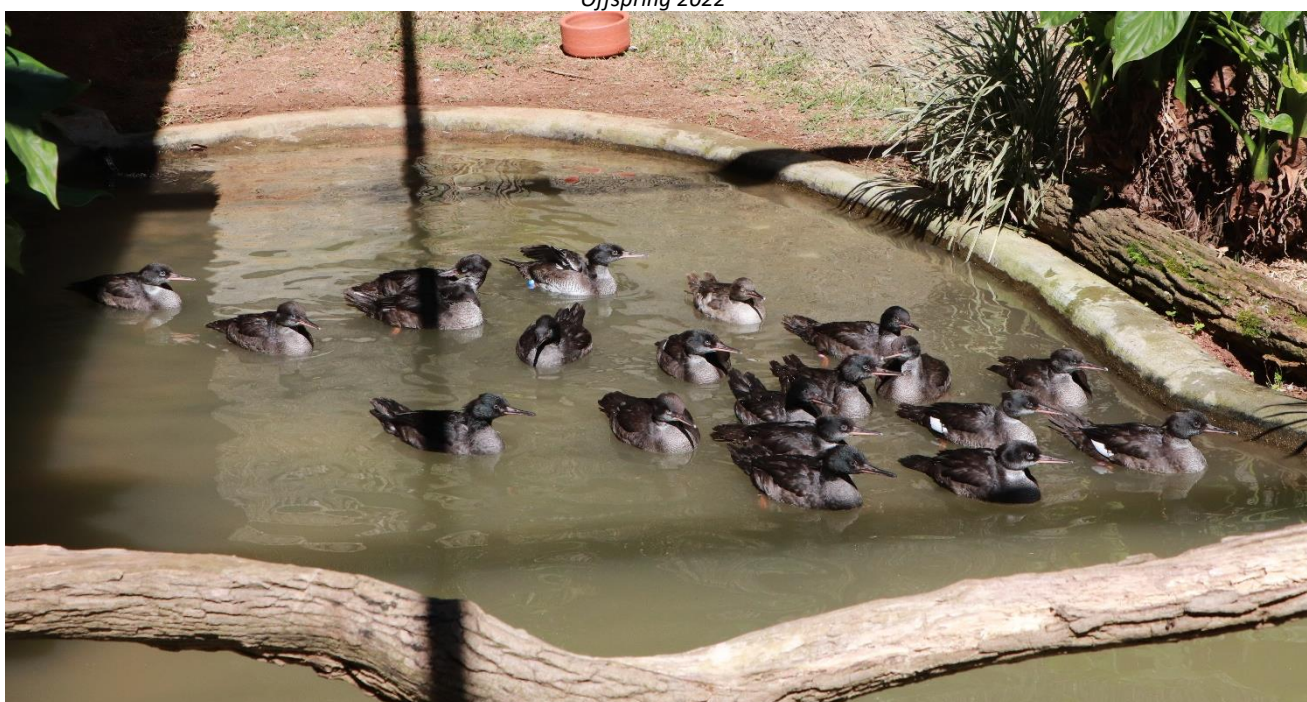
Hatch 24/06/2022



Hatch 13/08/2022



Offspring 2022



Offspring 2022

Exhibition enclosure

After so many years working for the conservation of the Brazilian Merganser, Zooparque Itatiba considered it was time to have ambassador animals on exhibition in the zoo. It is important to the Environmental Education Program at the zoo that our visitors get to know up close the species that we've been working for so many years. Because it's a conservation program, the Brazilian mergansers aviaries are off exhibition, but one pair of mergansers that are no longer participating in the breeding project was selected to be our ambassadors.

With the mergansers in the exhibition enclosure, it's possible for our visitor to get to know the species, its importance in the environment and threats. The area is close by a filtration system prepared specially for



children to learn about water filtration, and now they can learn more about the importance of clear water for the Brazilian merganser.



Side view of the enclosure



Side view of the enclosure



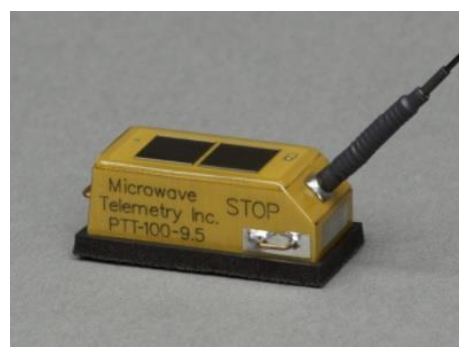
Inside view of the enclosure



Logos of our sponsors in the information plate.

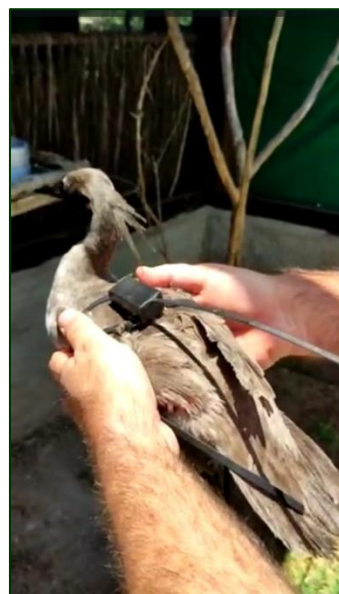
Tracking the birds

Considering the importance of monitoring the birds in the wild, Zooparque Itatiba purchased 3 units of a Solar Power PTT that provides the animal location through the Argos system, which was only possible with the donation by our sponsors. This way, it's possible to track the birds and monitor them in the wild, and is important for us to discover new information about the species migratory behavior and to follow the animal during the reintroduction program.

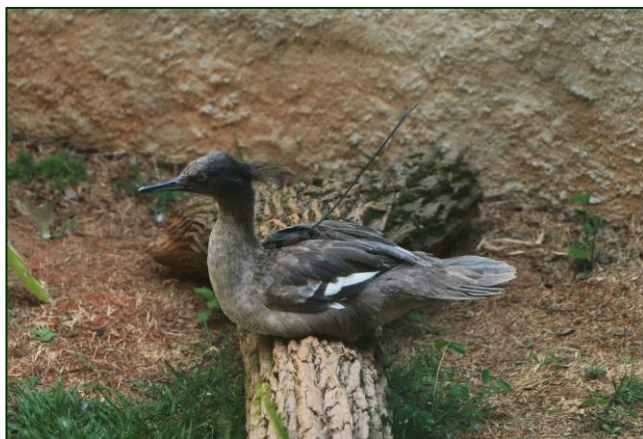




However, before acquiring the transmitters, a prototype was made using the corresponding measurements and specifications and used in a merganser from the ex situ population. Two females have carried the transmitters for 1 year, before it was taken out of them to see the conditions of the prototype. After this period, the birds were still able to dive, fish and fly normally while using the prototype with no difficulties. With this method, it was possible to check that the material used to attach the prototype to the bird was efficient and will be suitable to be used in the wild.



Picture 18-11-2021 – Zooparque team attaching the prototype to a female merganser.



Picture January 2023 - Females with the prototype attached to their bodies after 1 year of use.

The device chosen is a 9.5g Solar PTT from Microwave Telemetry and it uses the Argos Systems to track the animals in the wild. The Argos platform is a worldwide location and data collection system, which collects data from the Platform Terminal Transmitters (PTTs), and distributes the location to the final user. So it's only possible to use the Microwave Telemetry PTT if it's associated with the use of the Argos System.



Microwave
Telemetry, Inc.



Plans for 2023

Zooparque is now working in the region of Serra da Canastra National Park to monitor new territories and breeding pairs of Brazilian mergansers in the wild. The goal is to find the pairs, monitor them during breeding season and follow up the development of their offspring. Once the youngsters are in the correct age, just before leaving their parents, we'll capture 3 of them to attach the transmitters.

With this, it will be possible for us to track the birds in the wild and to test the performance of the devices and used for the reintroduction program.

Conclusion

All the work done in 2022 for the *ex situ* conservation of the Brazilian Merganser was only possible with the support of all our sponsors, so Zooparque Itatiba would like to thank all of you, without you this project wouldn't be so successful.

Hope that enjoyed reminiscing last year with us and that we will be working together again this year.



Thank you very much!

Robert Frank Kooij
Responsible Project Manager
Camila Piovani
Responsible Biologist