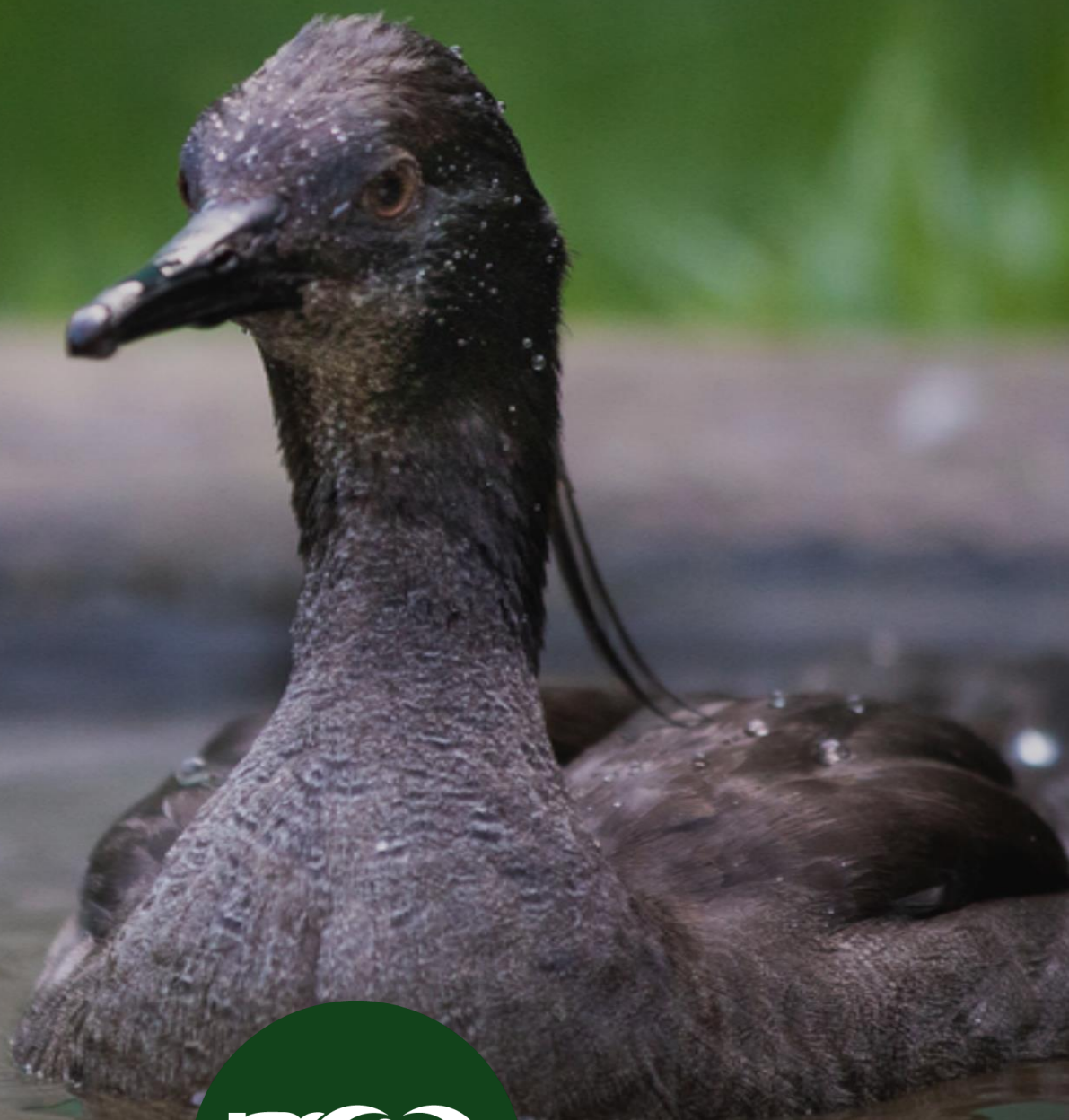


P · R · O · J · E · T · O
PATO-MERGULHÃO

UPDATE – DECEMBER 2024





Brazilian Merganser (*Mergus octosetaceus*)

Update December 2024

Breeding season

Because of the very unusual weather with extremely dry and hot months, the merganser in nature and with us at Zooparque had a bad and late season with lots of unfertile eggs. We only had three ducklings parent reared. This very instable weather may have affected the captive population, but even more the wild birds. According to researchers in the field, the birth rate in the wild was also inferior to previous years.



Offspring 2024.



Offspring 2024.

Tracking the birds

In 2023, we started working with the mergansers in Serra da Canastra and were able to capture two wild males and attach transmitters to them. Unfortunately, we had a few bumps along the way. After a couple of months, the transmitter of the young male stopped sending signals. We located the family using the location sent by the adult male's signal and the young male using the transmitter was no longer with them. After visiting the last transition location, we couldn't find neither the merganser nor the device. We believe that a predator took the young individual.

In the beginning of 2024, the transmitter of the adult male stopped sending signals, so we went back and tried to locate the family along the river. This time we were able to locate the family and find that the adult male was still alive, but no longer using the transmitter. We believe that the device detached from the bird and got lost in the water.

Even though the units were lost, we consider this first test using a satellite transmitter was successful. We were able to test the accuracy of the location points provided by Argos and see whether it would meet the



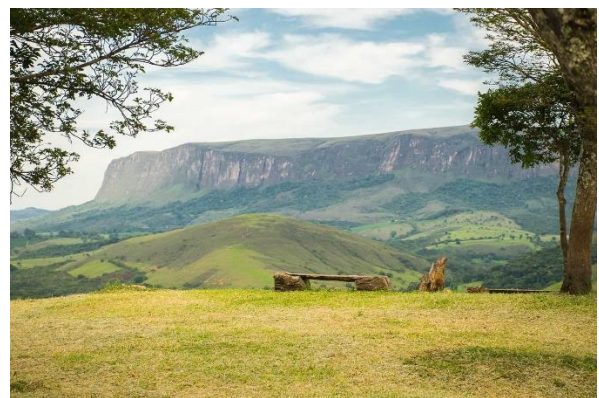
needs it had, so it can be used as tool for the reintroduction program. In addition, a new material has been tested in captive birds to avoid any future losses.



Attaching the transmitter on a captive Brazilian merganser for new testing.

Working in situ

This year Zooparque worked again in monitoring Brazilian Mergansers in the region of Serra da Canastra National Park. The area is made of two isolated metamorphic quartzite high plateau, separated by a large valley. Hundreds of streams originating on the plateau's flow downwards in waterfalls and cascades, including the São Francisco River.



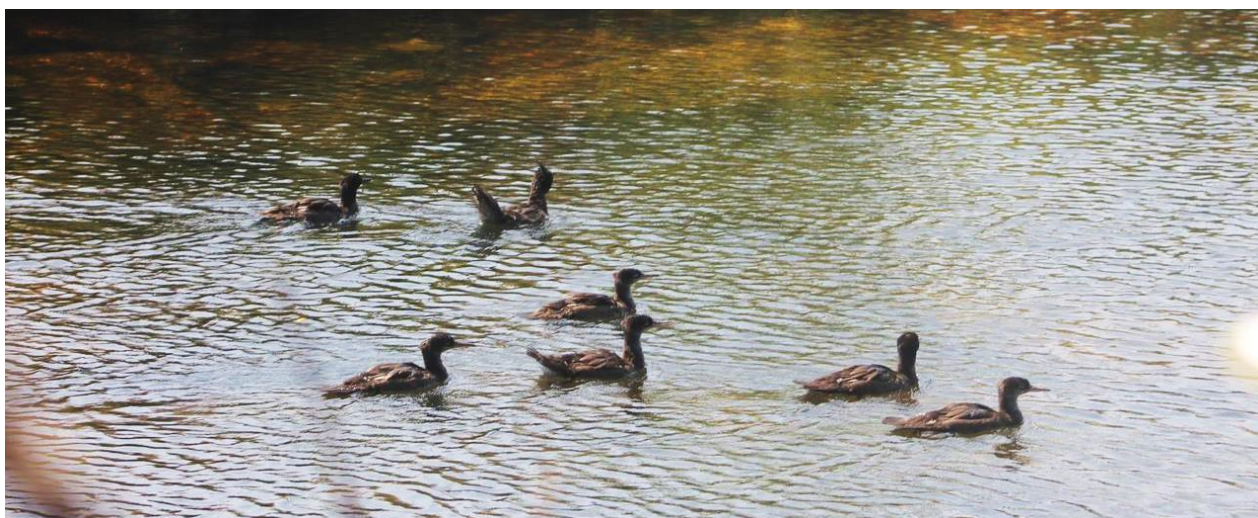
Images of the plateau of the Serra da Canastra National Park.



The work started in April; we monitored five different territories of the Brazilian merganser along the São Francisco River outside of the National Park limits and two territories in the same river but inside the National Park, on top of the plateau. We also monitored one pair, which we found in a territory of the Babilônia region, in the Rio Grande River.

It was very interesting to see the nest near the waterfall on the Rio Grande because the entrance of the nest was very open and the male had the habit of flying to the nest and stay there for up to 30 minutes while the female was inside her cave nest. The nest was very high and close to the waterfall, four ducklings were born, but all disappeared!

Even though we found three different pairs in different locations (two in the high part of the São Francisco River and one in the Rio Grande River), only one pair was successful and is currently with five individuals. Our goal was to use the three new transmitters we purchased with the help of our sponsors, and, in case of capturing juveniles; it will be very interesting to see where the offspring will go after their parents chase them away.



First picture of the pair with 7 ducklings in the wild.

In the second week of December 2024, Zooparque Itatiba went to Serra da Canastra for the capture. In the first day, the team went up the plateau to find the family of mergansers and try to capture them. We were very successful in our efforts and were able to capture three male merganser (1 adult and 2 juveniles). During the procedure, it was possible to collect biometrics data and to attach the transmitters. After this part of the work was over, the birds were released in the river and able to find the rest of their family.



Attaching the transmitter on the bird.



Attaching the transmitter on the bird.



Juvenile male.



Setting the mist net.



Team that participated in the capture.

Considering the importance of confirming the wellbeing of the animals, in the after the capture our team went up the plateau again to check on the birds. We followed the coordinates provided by the transmitters through the Argos satellite system to find the family and check that all of the birds were well and that the devices were properly attached.



Recent high quality location information collected by the Argos system.



All three males using the transmitter.



Young males using the transmitter.



Next steps

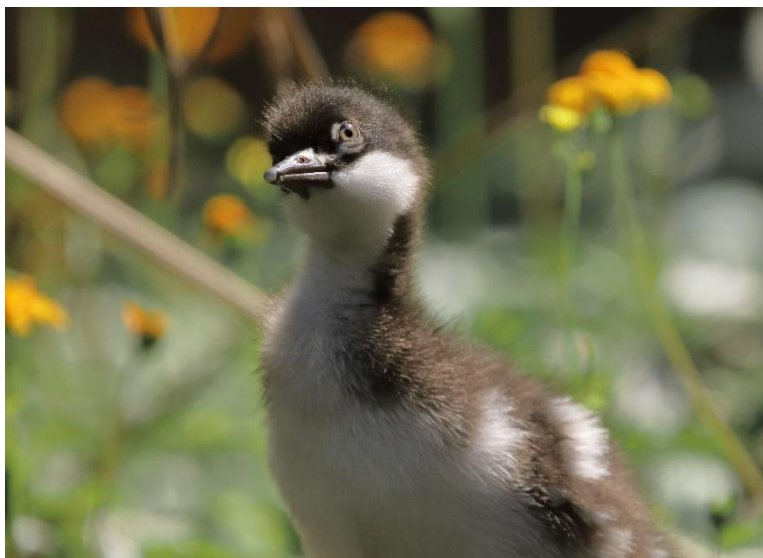
We hope that in the next few months, we'll have a few answers about what is happening with the offspring once the parents chase them away, which should be around March- May. This way we gain more knowledge about the species and about what is happening to them once they leave their family in search of new territories. In addition, in 2025 we aim not only to continue tracking the birds in the wild, but also to redouble our efforts in breeding the captive population. This is a very important step for us, because next year our goal is to continue to elaborate a pilot project for the reintroduction of the Brazilian merganser in the wild alongside with ICMBio and the researchers of National Action Plan (PAN).

Conclusion

All the work done in 2024 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. If you want to see a bit more about the expedition in Serra da Canastra, see the full video in the link below:

<https://www.youtube.com/watch?v=L8x65ZEIR3M>

Hope that that we will be working together again this year.



SPONSORS



SUPPORT





THANK YOU
VERY MUCH

Robert Frank Kooij
robert@zooparque.com.br

Camila Piovani
biologia@zooparque.com.br
[@piovanicamila](https://www.instagram.com/piovanicamila)

Zooparque Itatiba
www.zooparque.com.br
[@zooparque.itatiba](https://www.instagram.com/zooparque.itatiba)