

# TRACKING STURGEONS

A trial with 29 young sturgeons (*Acipenser sturio*) that have been released into the Biesbosch nature area will show whether the sturgeons can survive and find their way to sea via Rotterdam in a few months' time. PhD candidate Niels Brevé is doing this experiment in the hope of making his dream of having sturgeon in the Rhine again come true.

There have not been sturgeons in the Rhine for almost three quarters of a century. Apart, that is, from Brevé's previous experiments in 2012 and 2015. Those trials showed the sturgeon can survive in the Rhine and find their way out to sea. But those sturgeons were five years old. The new experiment will show whether young sturgeon that grow up in the Biesbosch can also manage this.

Sturgeons are sea creatures, explains Brevé. 'But they spawn in fresh water, for example in the Rhine mainstream. Hundreds of sturgeons were caught in the Biesbosch every year until 1931, with an average weight of 80 kilos. The last sturgeon was caught in 1952.'

## Bordeaux

The Biesbosch has traditionally been a place where migrating sturgeon of all sizes gather. Brevé therefore expects the sturgeon he is releasing will move on too. 'I hope and expect they will have sufficient salt tolerance in a few months to swim out to sea. Because that's their natural behaviour.'

To track their movements, the sturgeons have been fitted with tiny transponders (8mm, 2 grams) in their stomachs. The signals are picked up by 80 antennae along the route, attached to buoys belonging to the Directorate-General for Public Works.



Niels Brevé, PhD candidate in Marine Animal Ecology, releasing sturgeons into the Biesbosch nature area. Photo Arthur de Bruin

## 'I EXPECT THEY WILL HAVE SUFFICIENT SALT TOLERANCE IN A FEW MONTHS TO SWIM OUT TO SEA'

The 29 sturgeons come from a breeding farm near Bordeaux, the only one in Europe for the European sturgeon. The number is too small to draw statistical conclusions. 'You can't use this study to confirm whether the Rhine is suitable for the reintroduction of the sturgeon,' says Brevé. 'But it certainly gives an indication.' There will also be a follow-up if the breeding farm has success with its spawning efforts. The study, a collaboration between WUR, the Dutch angling association, the ARK rewilding association, WWF and the Directorate-General for Public Works, will take four months. That is how long the batteries in the mini transponder last. Then the fish will be off the radar and Brevé will be dependent on chance

bycatches and reports from professional fishers for news on his sturgeon. One thing Brevé knows for certain: these sturgeons will not be returning to spawn any time soon. 'They are French sturgeons and they're not used to the water in the Rhine.' If they do return, it will be a long wait: female sturgeons only reach sexual maturity after 15 to 22 years. The males are a bit quicker. A lot can happen at sea in that time. RK