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European mink in France



33rd European Mustelid Colloquium

Lisbon, Portugal, 8-11 October 2019

Current knowledge and conservation strategy

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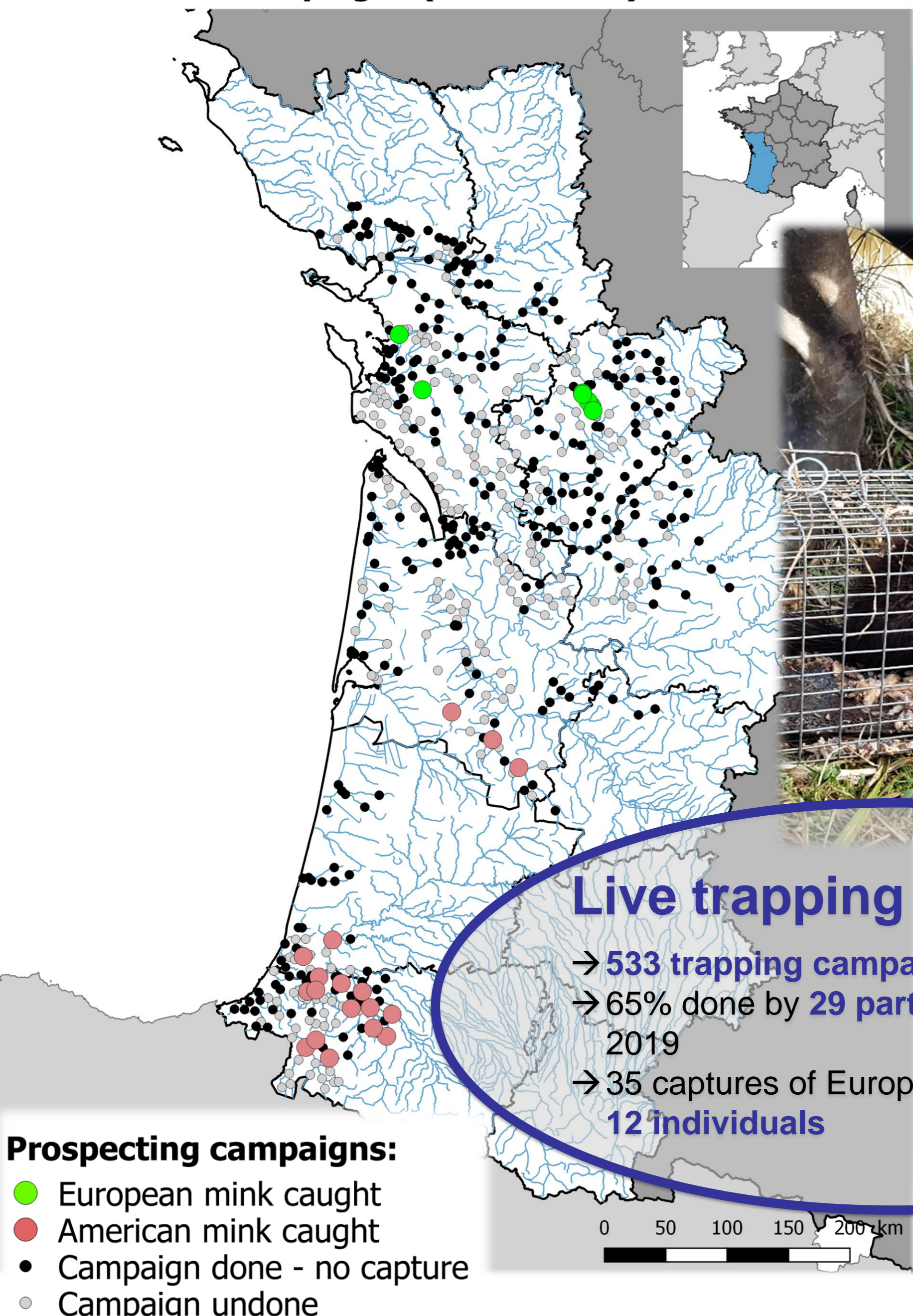
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Last hope for the most threatened European mammal?

European mink (*Mustela lutreola*) is classified as "critically endangered" by IUCN since 2011. France hosts one of the last wild populations, giving a key role for its conservation.

Despite two previous National Action Plans (NAP) between 1999 and 2011, the population continued to decline. Since 2015, the French government reinforces its actions through a new NAP, combining knowledge and management actions involving numerous partners. A LIFE programme (2017-2022) implements concurrently further actions in the population heart on the Charente basin.

Current situation of the European mink prospecting campaigns (March 2019)



Live trapping reactivation

- 533 trapping campaigns planned
- 65% done by 29 partners from 2016 to 2019
- 35 captures of European minks – at least 12 individuals

Toward a unique and collaborative database

- Data validation protocol
- Database created with data from previous National Action Plans
- Network of numerous partners collecting opportunistic data (other existing databases, local trained volunteers...)
- Opportunities to collect important data like the accidental capture of an European mink in Bayonne in March 2019 (first data since 14 years)

Updating distribution map and population monitoring

Development of non-invasive monitoring methods

- Environmental DNA metabarcoding: tested in 2015-2016, bad detection of semi-aquatic carnivores
- Footprint tunnels + hair-traps: tested in proven presence areas, usable throughout the year, needs 3 less time than trapping for similar detection (possible repetitions)
- Camera-traps: tests combined with tunnels, promising first results, less time than trapping
- Scat detection dogs: tests ongoing since 2017, promising but practical difficulties

Reintroduction and/or reinforcement strategy

- Definition of a conservation strategy
- Choice for releases into the wild?

Conservation strategy for European mink

Ex situ conservation and breeding programme

Breeding programme

- Two functional breeding centres: Calviac zoological reserve (3 ♀ - 3 ♂) and Zoodyssée (5 ♀ - 7 ♂)
- First success with 4 pups born in Zoodyssée in 2019

Limitation of accidental mortalities during pest control (i.e. coypus)

- Reactivation of the local coordinators network
- Fighting methods control: "Mink's hole" for escaping during reproduction season, limitation of bromadiolone use

Fight against identified main threats

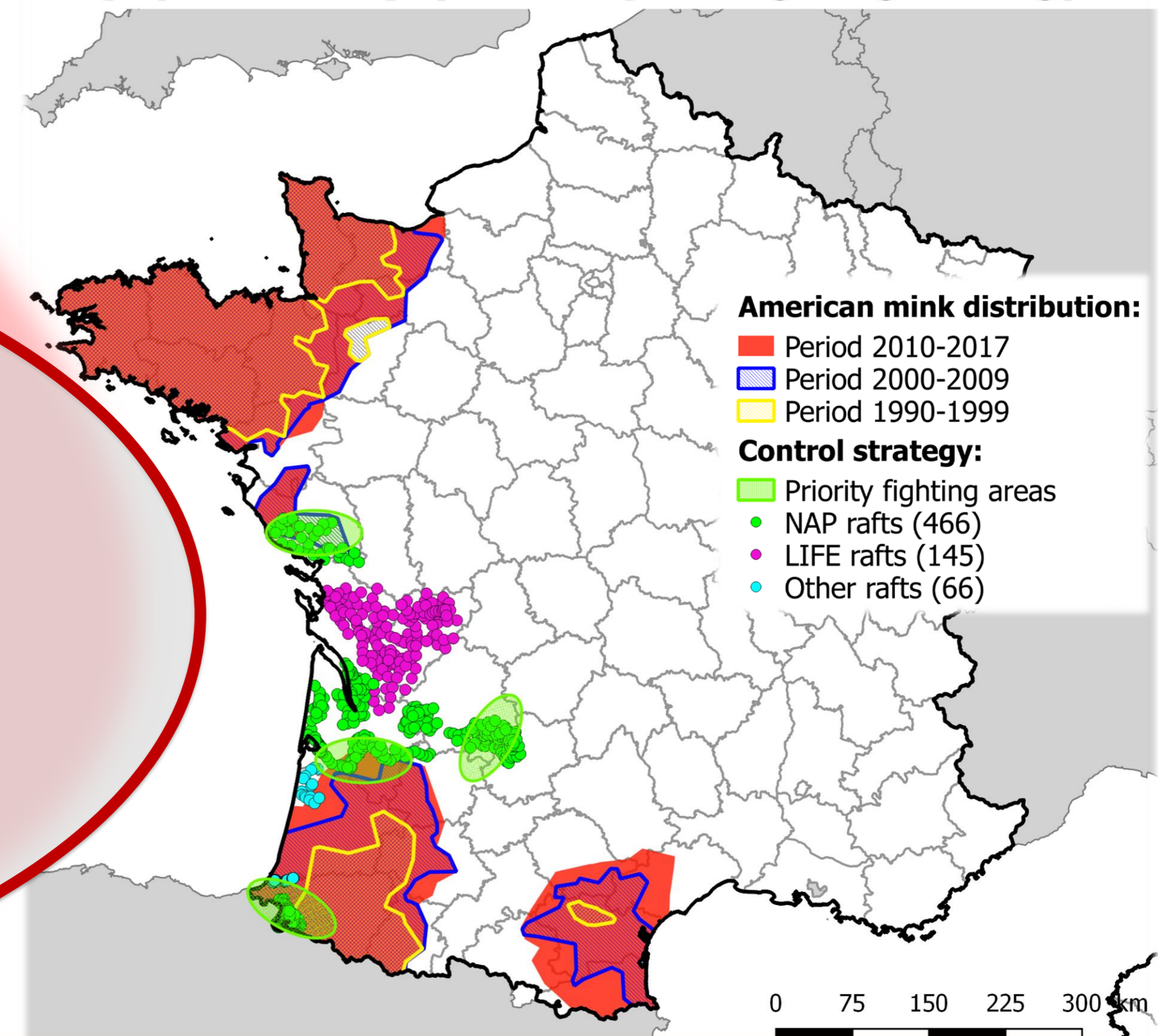
Habitat improvement

- Habitat management: launch of a "good practices guide" update, Natura 2000 managers involvement, parcels purchase, habitat restoration, refuge areas creation
- Roadkill black points: ranking cartographic methodology, works in progress in different places (nearly 210 hydraulic bridges requalified or secured by department councils 16, 17, 33, 40 or large infrastructures managers, diagnosis in department 24...)

American mink population control

- Expansion monitoring: publication of a distribution map updated with data collected within a national trappers and other partners survey
- Listed as Invasive Alien Species in France in 2018
- Definition and implementation of a control strategy with local partners between 2015 and 2019: 466 mink rafts deployed in priority fighting areas (40 individuals caught), 211 deployed as part of other programmes (LIFE, compensatory measures... 43 individuals caught)
- Farms securisation: definition of a control protocol applied in the 2 existing farms in NAP area (2017-2018)

Evolution of the American mink distribution 1990-2017 (reproductive populations) and fighting strategy



Toward the 3rd National Action Plan: a better knowledge to improve actions implementation

- Populations: long-term distribution monitoring, dynamics, genetics and potential internal threats (sanitary...)
- External threats: American mink impact and dynamics, increase of habitat suitability, reduction of accidental mortality risks
- Conservation strategy: reproduction and breeding optimisation, preparation of releases into the wild

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