Monitor the evolution of the European beaver (*Castor fiber*) distribution in France: methodes, tools and results

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On the brink of extinction in France in the beginning of the XXth century, the European beaver *Castor fiber* has recolonised its lost territories since its legal protection in 1909.
To monitor this positive development, the Ministry in charge of ecology entrusted the French Biodiversity Agency (OFB) in 1987 with the creation and management of a network of specialists of the species, the Beaver Network.
Initially primarily internal to the OFB, the Beaver Network has been evolving since 2020 and now involves multiple partners to expand its monitoring capabilities. This evolution also requires technical improvements for data collection.


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Organisation of the Beaver Network

- Different nested **geographical scales**: national / regional / departmental
- National **coordination by OFB**
- Includes a number of partners from **different stakeholders**: NGOs, river managers, land managers, hunters, etc.
  → To **monitor beaver's distribution** by organising surveys to cover as much territory as possible
  → To **share data and knowledge** and produce a common distribution map

A national protocol for monitoring

- Based on the **search for evidence** of presence and absence along rivers
- **Linear representation** of presence/absence on a reference rivers network
- Priority given to **new areas** and/or **colonisation fronts**
- Prospecting **strategy definied locally** by observers
- In parallel: collection of **opportunistic observations**


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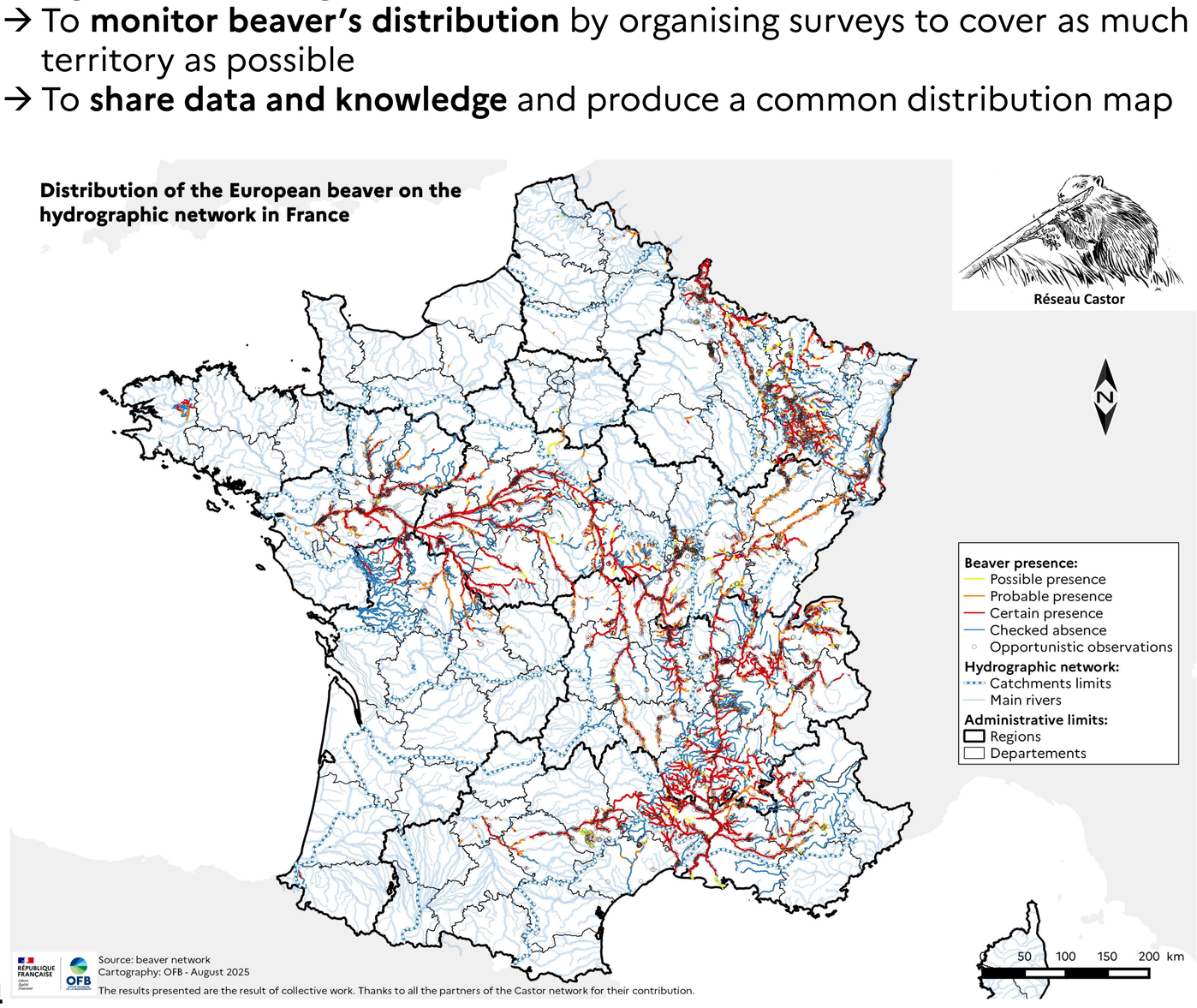


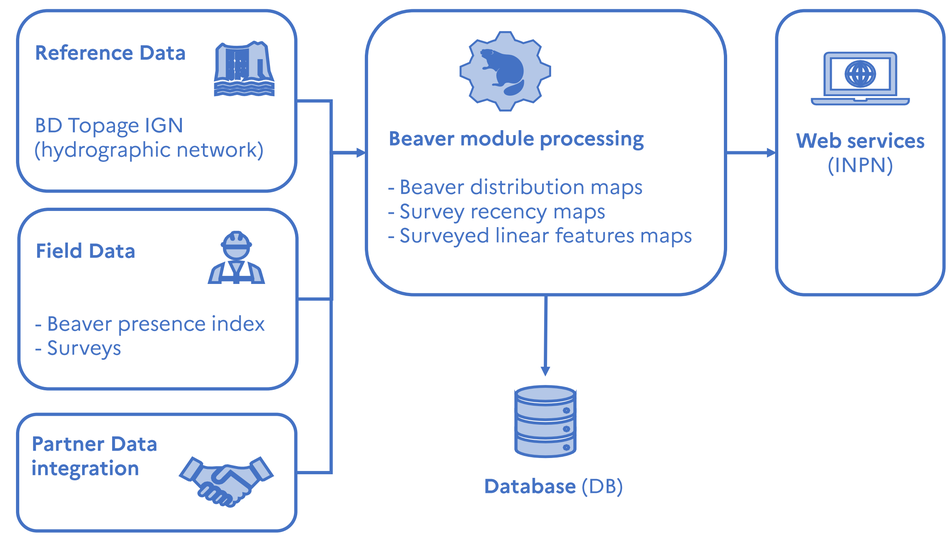
Development of an application to centralise data

Currently:

- Postgre/PostGIS database with a centralised data entry → **bottleneck!**
- Linear distribution only with prospection data → **gap between maps and reality**
- Size of presence/absence sections defined by observers → **interpretation bias**

Ongoing development:

- **Field data entry tool**
- Integration of **opportunistic observations** for presence for the distribution map
- **Automatic and common translation** of point data to linear data (section sizes)



Monitoring the expansion of the beaver's distribution nationwide represents a major challenge, but also a tremendous opportunity to bring together a wide variety of partners within a network and share knowledge and experiences.
The development of the application will facilitate data collection and sharing within the Beaver Network and will also make the beaver's distribution more widely accessible. It will thus improve awareness of beaver presence among local stakeholders.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Réseau Castor

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