



Muskrat

(*Ondatra zibethicus*)

Managing muskrats in the Audomarois marshes

Ondatra pest-control group

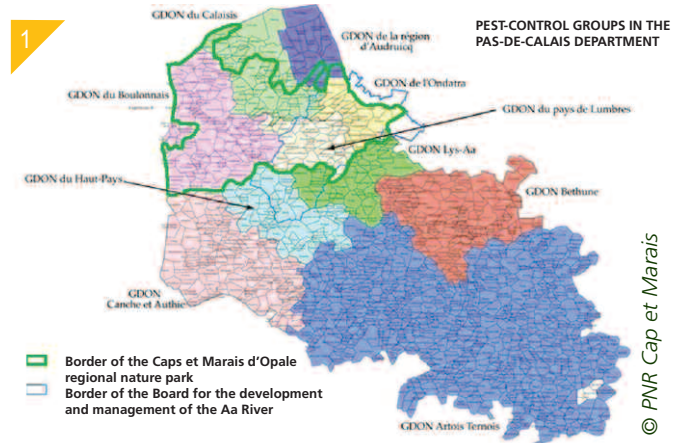
- Non-profit organisation founded in 1955, transformed into a pest-control group in 2003 (ministerial decree).
- The main missions include:
 - coordinating volunteer trapping of muskrats in the Saint-Omer urban area (CASO), e.g. collecting the muskrat tails, paying the trappers, providing the traps;
 - raising awareness and organising training courses for trappers.
- Contact: Marie Lefebvre, President
- mairie-de-serques@wanadoo.fr

The Caps et Marais d'Opale regional nature park

- The park was created in March 2000 by merging the Boulonnais and Audomarois parks. It is managed by a board comprising 152 towns, 6 intermunicipal associations, 5 consular bodies, the Pas-de-Calais departmental council and the Nord-Pas-de-Calais regional council.
- The park provides technical and administrative assistance to the Ondatra pest-control group (organisation of tail collections, informational activities, assessments and board meetings, etc.).
- Contacts: Luc Barbier - lbarbier@parc-opale.fr, Clémentine Coulon - ccoulon@parc-opale.fr

Intervention site

- The Caps et Marais d'Opale regional nature park is located in the northern part of the Pas-de-Calais department. The landforms are highly diverse and include littoral environments (dunes, cliffs and estuaries), marshes and wetlands, forests, bocage landscapes, limestone swards and heathlands.
- The Ondatra pest-control group works in the Saint-Omer urban area (CASO), which is made up of 19 towns belonging to the regional nature park.



1. Map of the Caps et Marais d'Opale regional nature park, March 2005. DDAF 82, Nord-Pas-de-Calais regional council, Smage Aa, Cap et Marais d'Opale regional nature park.

Disturbances and issues involved

■ Ecological impacts

- Muskrats compete with native species such as the European water vole.
- They are also predators of freshwater mussels that are required for the reproduction of the Amur bitterling (*Rhodeus sericeus*), a freshwater fish species.
- They dig burrows that destabilise banks and canals.
- Muskrats are a vector of disease and parasites (*fasciolosis*, *leptospirosis*, *tularemia*, *alveolar echinococcosis*).

■ Impacts on human activities

- Damage to crops (cereals, beets, vegetables) and to meadows.
- Damage to banks and dikes.
- Damage to roads (undermining).
- Problems for fishing and fish farming (loss of water from ponds, damage to nets, destruction of spawning grounds).

Interventions

- The Ondatra pest-control group manages trapping of muskrats by volunteer and professional trappers in the Saint-Omer urban area (CASO) in a partnership with the Caps et Marais d'Opale regional nature park.

■ Trapping

- Trapping is carried out year round.
- Conibear and cage traps are supplied by the pest-control group to the volunteers.
- The group collects the muskrat tails from the volunteer trappers and pays a bounty of 1.50 euros per tail.
- An annual trapping report compiles the data from:
 - the volunteer trappers (approximately 40);
 - the professional trappers, including two from CASO, one from the town of Saint-Omer and one from Eden 62, the Board for the management of sensitive natural areas in the Pas-de-Calais department.

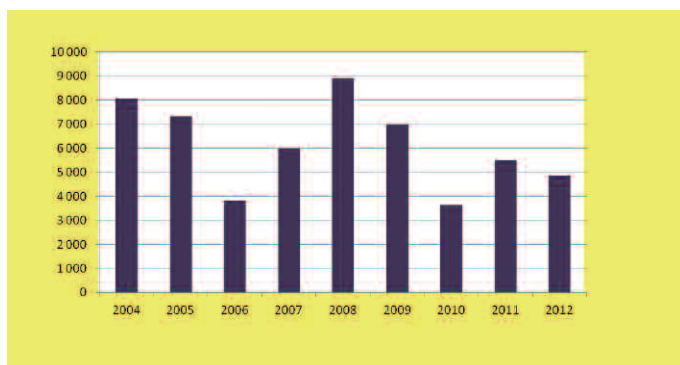
■ Results

- Muskrat populations have been in decline since 2011. The pest-control group has the unconditional financial support of its local partners in balancing its budget, which means it can pursue its work over the long term.
- The number of volunteer trappers has stabilised at around 40, with a majority of retired persons. It is difficult to convince new trappers because the work takes a great deal of time.
- It is probable that chemical means, though prohibited, continue to be used to a certain degree.
- It is necessary to continue efforts to recruit new trappers, to reward them and maintain their enthusiasm, notably by organising meetings.



2. 3. *Ondatra zibethicus*.

Annual captures.



*Annual captures by type of trapper. (NI: no information, * up to October 2013, ** up to 18 November 2013).*

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
CASO trappers	1 949	2 644	1 432	1 541	1 863	1 473	1 382	2 058	1 776	1 012 *
Departmental brigade	NR	245	NR	NR	0	0	0	0	-	-
Tail bounty	5 929	4 440	2 393	4 439	6 890	5 417	2 144	3 334	3 182	2 893
(incl. high-impact operation)	-	-	-	-	-	-	-	-	[1 145]	[549]
Saint-Omer trapper	-	-	-	-	154	73	110	126	227	114 *
Romelaere protocol	78	45	31	24	50	23	16	-	-	-
Eden 62	-	-	-	-	-	-	-	58	106	51 **
TOTAL	7 956	7 374	3 856	6 004	8 957	6 986	3 652	5 576	5 291	4 070



Funding of traps and tail bounties for the year 2013.

Source of funds	Amount
CASO	10 000 €
7th section Wateringues	1 500 €
AAPPMA la Concorde	400 €
Fees	91 €
Total	11 991 €

Information on the project

- Every two years, a training programme for trapping certification is organised in a partnership with the Pas-de-Calais departmental hunting federation.
- In March, a meeting is organised with the volunteer and professional trappers to check traps in the field, talk shop, review regulations and sit down for a good meal.
- During February and March, over a three-week period, a “high-impact operation” is organised in a favourable trapping period. The objective is to lay as many traps as possible over a short period, involving a maximum number of volunteer and professional trappers.
- A brochure, prepared in conjunction with a doctor on the health risks involved in trapping, was distributed to the trappers.
- Articles on the work (meetings, tail collections, high-impact operations) are regularly published in the local press (*Indépendant* newspaper, *Voix du Nord* newspaper).

Outlook

- The yearly meetings in March will be continued to bring together and motivate the trappers.
- An exhibition on muskrats and trapping will be prepared to inform the public and elected officials, and to recruit new trappers.
- Information on the pest-control group will be supplied to the press.

Note on applicable regulations

- The species may not be introduced into the natural environment (ministerial decree dated 30 July 2010).
- Possession of the species is subject to an authorisation (ministerial decrees dated 10 August 2004).
- The species is listed among those that may be hunted (ministerial decree dated 26 June 1987).
- The species is considered a pest throughout continental France (ministerial decree dated 24 March 2014).
- The species is harmful to plants and must be controlled (ministerial decree dated 31 July 2000, modified by ministerial decree dated 25 August 2011).
- The conditions for the control of coypu and muskrat populations were set by decree dated 6 April 2007.
- Trapping conditions for animals declared as pests were set by decree dated 27 June 2009, modified by the decree dated 13 December 2011.

Author: Sandra Fernandez, Irstea



4. Cage trap.

For more information

- Internet site of the Saint-Omer urban area (CASO): <http://www.ca-stomer.fr/>
- Ondatra pest-control group, 2013. Note on operating conditions.

