

Assessment of the transitional national action plan for the European mink

January 1st, 2015 – December 31st, 2018



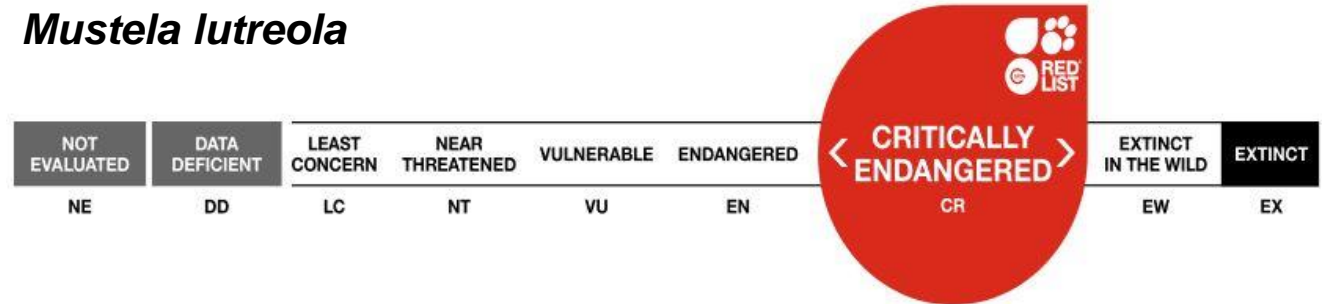
Aurore PERRAULT (DREAL)
Maylis FAYET (ONCFS)
Yoann BRESSAN (ONCFS)

Status of the species

- Since 2012, classified as « critically endangered » in Europe (IUCN)



Mustela lutreola



- Since november 2017, classified as « critically endangered » on the French red list (IUCN France, MNHN, SFEPM, ONCFS)

Nom	Catégorie	Critère
France		
Liste rouge des mammifères continentaux de France métropolitaine (2017) (listé <i>Mustela lutreola</i>)	CR	A4c C2a(i)

History

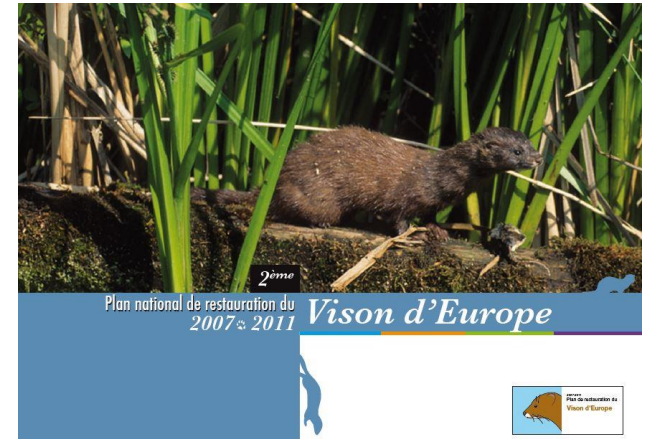
National Action Plan (PNA) 1 (1999-2003)

- Animation by GREGE
- Main actions:
 - Prospecting campaigns by trapping
 - Identification and limitation of threat factors
 - Integration of European mink into the Natura 2000 politics
- Assessment

History

PNA 2 (2007-2011)

- Animation by ONCFS
- Main actions:
 - Populations reinforcement
 - Collision risk treatment
 - Control of accidental mortality by trapping
 - Fight against American mink
- Assessment



History

Transitional PNA (PNAi) (2015-2018)

- Why a PNAi? Priority to actions
- Actions classified into 4 main Objectives:
 - European mink monitoring
 - Fight against the factors of threat in nature
 - Conservation and breeding strategy of European mink
 - Transversal actions (financing, animation, communication, etc.)

The PNAi team

Structure	Contact	Function	Mail
DREAL Nouvelle-Aquitaine	Aurore PERRAULT	National coordination	aurore.perrault@developpement-durable.gouv.fr
ONCFS	Christelle BELLANGER	Scientific and technical leading	christelle.bellanger@oncfs.gouv.fr
	Yoann BRESSAN		yoann.bressan@oncfs.gouv.fr
	Maylis FAYET		maylis.fayet@oncfs.gouv.fr
Cistude Nature	Jean-Baptiste PONS	Network leading	jean-baptiste.pons@cistude.org
	Nolwenn PONS	Technical support for the Natura 2000 facilitators	nolwenn.pons@cistude.org

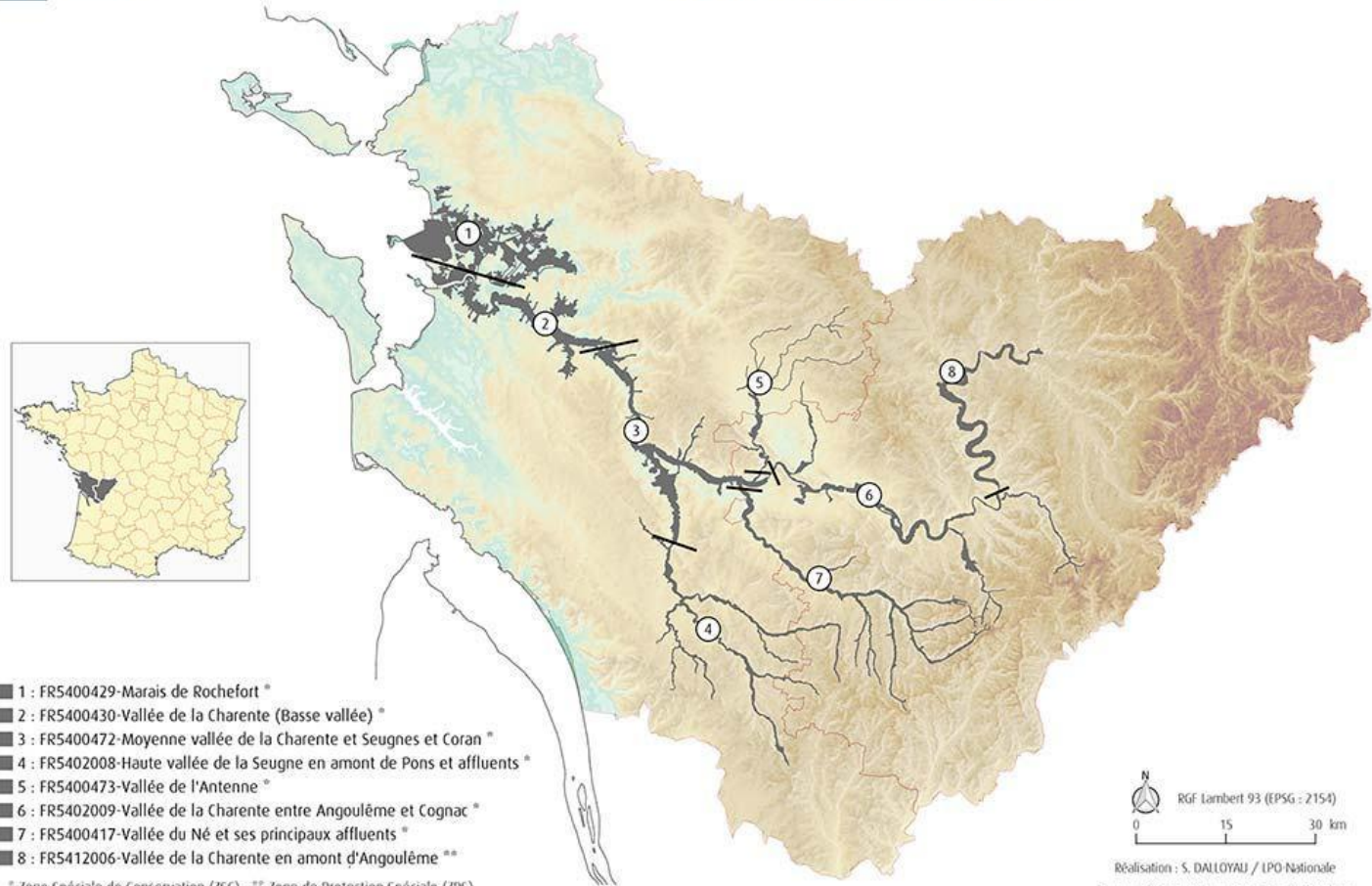
LIFE Vison



- Managed by the LPO, 2017-2022
- Area of actions: Natura 2000 sites of the Charente's watershed



Périmètre d'action du Life



LIFE Vison



- Goals:
 - Reduce the causes of European mink mortality
 - Restore, develop and secure habitats of European mink
 - Improve knowledges on reproduction and the remaining populations
 - Integrate European mink conservation into the public policies and make local actors aware of the species

- Which links with the PNA?

To learn more about LIFE: <https://lifevison.fr/>

Planning of the 3rd PNA

2019

April, 2nd

Steering committee: PNAi assessment + launch PNA 3 writing 3

May 28-29th

Thematic working groups

June 12th

Scientific council

July 11th

CNPN: Presentation of the PNAi assessment

Exchanges and dialogue

October

Steering committee : presentation of PNA 3

2020

March

CNPN: presentation of PNA 3

Role of the scientific council (CS)

- Consultation on scientific topics
 - By meeting: face-to-face + visio
 - By a collaborative platform
- Meetings as much as needed
- 8 permanent members:
 - M. Philippe BERNY (Vetagro Sup)
 - M. Sébastien DEVILLARD (University of Lyon)
 - Mme Christine FOURNIER (GREGE)
 - M. Tiit MARAN (Zoo of Tallin)
 - M. Johan MICHAUX (University of Liège)
 - M. Madis PODRA (LIFE Iutreola Spain)
 - Mme Audrey SAVOURE-SOUBELET (MNHN/AFB - UMS Patrinat)
 - M. Julien STEINMETZ (ONCFS)
- Ad hoc experts

Order of the day

1. PNAi assessment
 1. Presentation of the assessment
 2. Discussion about the assessment
2. Proposed actions for the PNA3
 1. Review of the workings groups
 2. Discussion about PNA3 actions



Order of the day

1. **PNAi assessment**
 1. **Presentation of the assessment**
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Plan

Assessment of the European mink PNAi

January 1st 2015 – December 31st 2018

Objective 1: Monitoring within the PNAi application area

Objective 2: Fight against the factors of threat in nature

Objective 3: Conservation and breeding strategy of the European mink

Objective 4: Transversal actions





Objective 1: Monitoring within the PNAi application area



Objective 1: Monitoring within the PNAi application area

	N° action	Priority	Actions
Use existing data	111	1	Database management European mink, European polecat, American mink
	112	1	Concerted use of partners' available data
Characterization of European mink populations hearts	121	1	Organize the data providers networks to stimulate the feedback of opportunistic information (accidental trapping, observations, dead minks)
	122	1	Use of the genetic tool to identify the European mink species
	123	1	Start the first phase of monitoring campaigns with different methods
	124	2	Characterize the identified European mink populations hearts



Objective 1: Monitoring within the PNAi application area

Action n°111: Database management European mink, European polecat, American mink

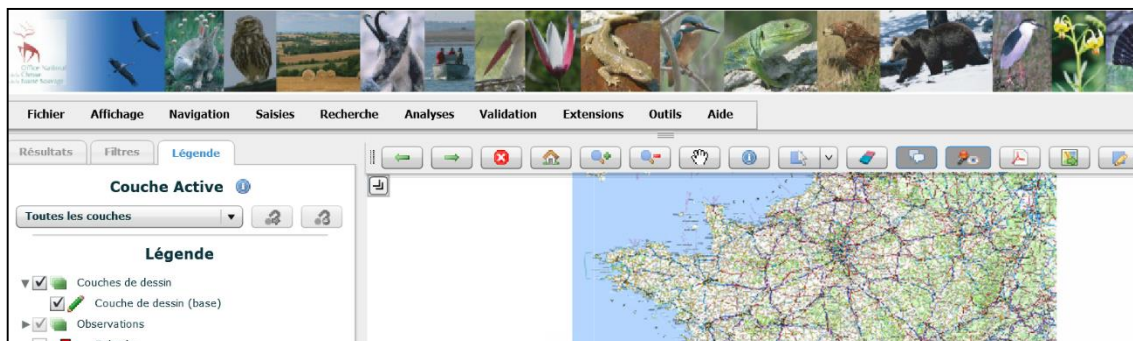
- Creation of a database
 - Centralisation of historic data from all partners
 - All European mink, American mink, polecat and uncertain data
 - Under QGIS®
 - Managed by ONCFS
 - Accompanied by a data dictionary
- Creation of a specific database for genetic samples



Objective 1: Monitoring within the PNAi application area

Action n°111: Database management European mink, European polecat, American mink

- Analyze collaboratives platforms: @Faune-Aquitaine
- Inclusion of the ONCFS specific data: @BdBiodiv







Objective 1: Monitoring within the PNAi application area

Action n°112: Concerted use of available partners data

- Writing of a note on the species distribution and its inclusion into public policies



du Vison d'Europe
Décembre 2018



Le Vison d'Europe est l'une des espèces les plus menacées en Europe et en France. Il est classé « en danger critique d'extinction » (CR) sur les listes rouges nationale et mondiale de l'UICN (Union internationale pour la conservation de la nature). L'espèce a bénéficié de deux Plans Nationaux d'Actions (PNA) en 1999-2003 et 2007-2011. Depuis 2014, un PNA intermédiaire met en œuvre des actions d'urgence dans l'attente de la rédaction d'un 3^{ème} PNA.

Le Vison d'Europe est une espèce particulièrement discrète, difficile à observer en nature. Les indices de présence habituellement utilisés pour suivre les espèces de mammifères (crottes et traces) sont rares et permettent difficilement d'identifier avec certitude l'espèce. Le Vison d'Europe est par ailleurs très difficile à distinguer de deux espèces assez proches morphologiquement : le Vison d'Amérique et le Putois d'Europe. Enfin, les suivis réalisés en France et en Europe ont montré que le Vison peut se déplacer sur de très grandes distances.


Actuellement, les sources de données disponibles pour caractériser la présence de l'espèce sont de deux ordres :

- Des campagnes de prospection visant spécifiquement le Vison d'Europe :
 - Une première campagne mise en œuvre jusqu'en 2003 dans le cadre du 1^{er} plan national a permis de définir l'aire de répartition française du Vison d'Europe entre 1991 et 2003.
 - Une actualisation de cette répartition géographique est en cours avec un protocole prévoyant plus de 500 campagnes de prospections en 4 ans (2016-2020), réparties sur l'ensemble de l'aire de répartition possible, probable ou certaine de l'espèce.
- Des observations aléatoires :

Il s'agit principalement d'individus capturés lors de campagnes de lutte contre les animaux prédateurs (Ragondin par exemple), ou bien de cadavres de Visons récoltés en bord de route. Quelques observations directes viennent compléter ces données.

La cartographie présentée ci-dessous permet de visualiser ces données sur les périodes 2004-2009 et 2010-2014. La représentation se fait à l'échelle des bassins versants (Sous-Secteurs Hydrographiques de la couche BD Carthage de l'IGN et des Agences de l'Eau) pour lesquels des données de présence ont été récoltées. Seules les données avec identification certaine de l'espèce ont été retenues. Les caractéristiques de discrétion propre à l'espèce, n'interdisent pas l'hypothèse de présence de celle-ci sur des secteurs où aucune donnée n'a pu être collectée. Ceci est d'autant plus vrai sur les zones limitrophes des bassins où la présence est validée.

Pour mémoire, les textes réglementaires qui régissent la protection nationale de l'espèce et de ses habitats (art L.411-1 CE, Arrêté ministériel mammifères du 23/04/2007) interdisent la destruction des sites de

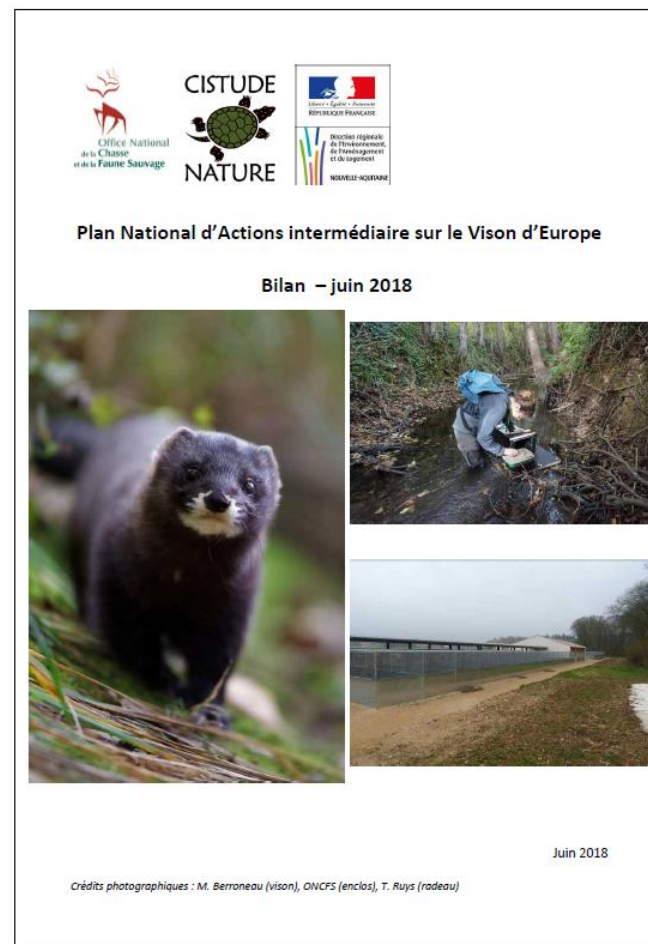
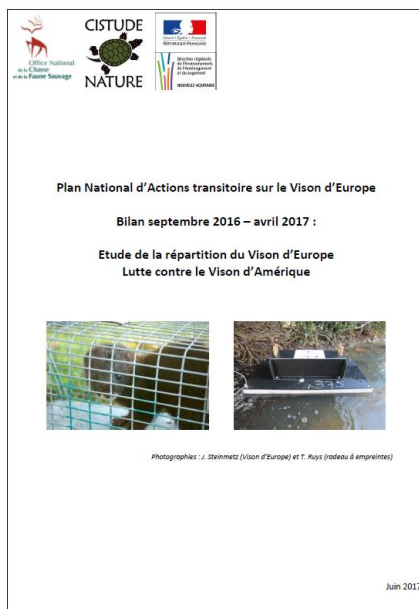




Objective 1: Monitoring within the PNAi application area

Action n°112: Concerted use of available partners data

- Writing of a note on the species distribution and its inclusion into public policies
- Annual PNAi assessments: 2016 and 2017





Action n°112: Concerted use of available partners data

- Writing of a note on the species distribution and its inclusion into public policies
- Annual PNAi assessments: 2016 and 2017
- Evaluations:
 - DHFF: conservation status of the species
 - IUCN: red list

Mustela lutreola

NOT EVALUATED	DATA DEFICIENT	LEAST CONCERN	NEAR THREATENED	VULNERABLE	ENDANGERED	CRITICALLY ENDANGERED	EXTINCT IN THE WILD	EXTINCT
NE	DD	LC	NT	VU	EN	CR	EW	EX

Summary Classification Schemes Images & External Links Bibliography Full Account



Objective 1: Monitoring within the PNAi application area

Action n°121: Organize the data providers networks to stimulate the feedback of opportunistic information (accidental trapping, observations, dead minks)

- Achievement and release of a form to accompany the data
- Reactivation of the points of contact network (action n°211)
- Start the centralisation of trapping assessments available in DDT(M)s

FICHE D'IDENTIFICATION MUSTELIDES A REMPLIR PAR LE REFERENT DU RESEAU

INFORMATIONS SUR LE REFERENT DU RESEAU	
Nom et prénom du référent : _____	
Lieu et heure de départ : _____	
Lieu et heure d'arrivée sur le site de capture : _____	
Heure et lieu de retour : _____	
Etype éventuelle : _____	
Kilométrage total : _____	
INFORMATIONS SUR LA CAPTURE	
Date : _____	
Nom et prénom du piégeur : _____ Tél : _____	
Département : _____ Commune : _____ Zone / Lieu dit : _____	
Rivière : _____ Bassin : _____	
Circonstance de la capture : piégeage rondin <input type="checkbox"/> piégeage mustélides <input type="checkbox"/>	
Autres : _____	
Type de piège : _____ Coordonnées XY (Lambert 93) : _____	
Lieu précis de la capture : Joindre à la fiche, une carte (1/25000) pointant le lieu précis de la capture	
Coordonnées GPS pour les référents équipés de GPS : _____	
INFORMATIONS SUR L'ANIMAL CAPTURE	
Vison d'Europe <input type="checkbox"/> Vison d'Amérique <input type="checkbox"/> Putois <input type="checkbox"/> Autres : _____ <input type="checkbox"/>	
Photographies (obligatoires) : tête face <input type="checkbox"/> tête profil <input type="checkbox"/> corps <input type="checkbox"/> poil de bourse <input type="checkbox"/>	
Transmises le : / / 20 à : _____	
Si possible :	
Sexe : Mâle <input type="checkbox"/> Femelle <input type="checkbox"/> Prise de poids : oui <input type="checkbox"/> non <input type="checkbox"/>	
Estimation de l'âge : Jeune <input type="checkbox"/> Jeune adulte <input type="checkbox"/> Adulte <input type="checkbox"/>	
Poids : _____	
Etat général : Très bon <input type="checkbox"/> Bon <input type="checkbox"/> Moyen <input type="checkbox"/> Mauvais <input type="checkbox"/> Indéterminé <input type="checkbox"/>	
Signes particuliers : _____	
RECUPERATION CADAVRES PAR LE SERVICE DEPARTEMENTAL DE L'ONCFS	
Lieu de transfert du cadavre : SD : _____ Commune : _____	
Numéro de la boucle auriculaire d'identification : _____	
Observations	

Merci de retourner cette fiche à : ONCFS, Christelle Bellanger, 255 route de Bonnes, 86000 Poitiers
mail : christelle.bellanger@oncfs.gouv.fr Tél : 05.49.52.01.50 accompagnée des photographies de l'animal, des poils (dans une enveloppe en papier) et de la localisation du site de capture sur une carte.



Objective 1: Monitoring within the PNAi application area

Action n°122: Use of the genetic tool to identify the European mink species

- Sample (dead minks, hairs and scats) collected during protocols implementation: European mink monitoring (action n°123) and fight against American mink (action n°223)





Objective 1: Monitoring within the PNAi application area

Action n°122: Use of the genetic tool to identify the European mink species

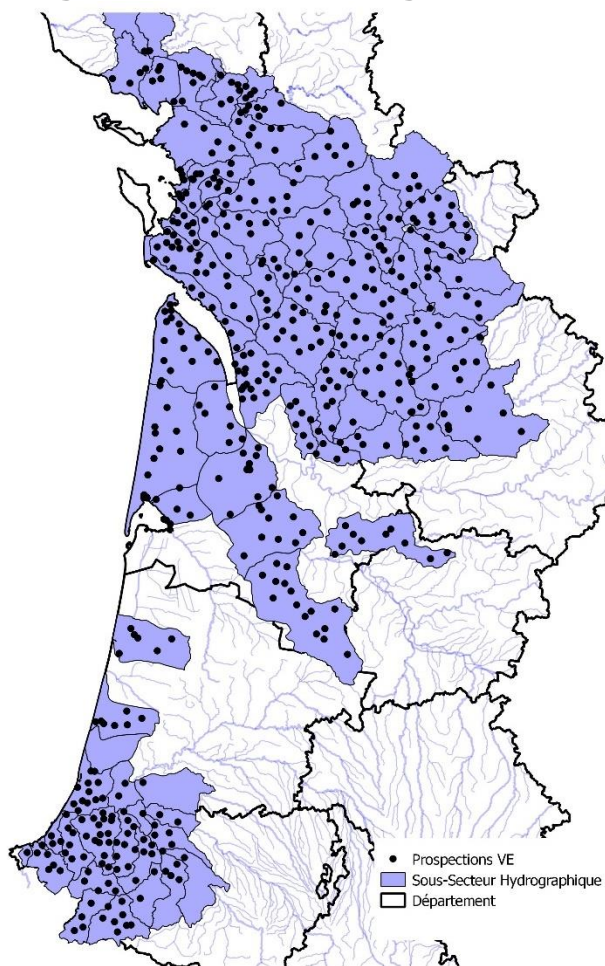
- Sample (dead minks, hairs and scats) collected during protocols implementation: European mink monitoring (action n°123) and fight against American mink (action n°223)
- Samples centralisation and storage to ONCFS
- Management through the dedicated database (action n°111)
- Thinking on possible genetic analysis depending of targeted questions



Objective 1: Monitoring within the PNAi application area

Action n°123: Start the first phase of monitoring campaigns with different methods

1) Targeted prospectings:

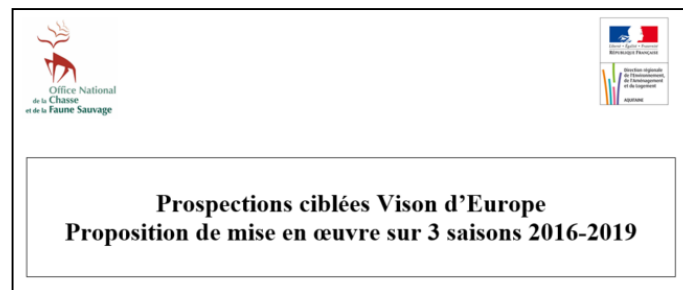


Initial protocol (started in 2016):

- **371 campaigns**
- from 2016 to 2019
- presence data > 2004

Adjusted protocol (March, 2018):

- 371 + 148 = **519 campaigns**
- from 2016 to 2019
- presence data > 2004



Trapping protocol

Action n°123: Start the first phase of monitoring campaigns with different methods

1) Targeted prospectings:

Position of traps in the field:

- 10 traps during 10 consecutive nights or 2x4 nights (excluding week-end)
- Traps distributed among 3-4 groups covering approximately 3 km of river or 3 km² of swamp

Bait: sardines in oil

Period:

September → March






Objective 1: Monitoring within the PNAi application area

Action n°123: Start the first phase of monitoring campaigns with different methods

1) Targeted prospectings:

Prospecting result form:

 **Opérations de capture de Vison d'Europe**

Responsable de la campagne (nom + structure) LACANNE Jean Jacques SD LANDES

Autres intervenants —


Bassin versant Adour Communes TARNOS / ST MARTIN de SEIGNANX

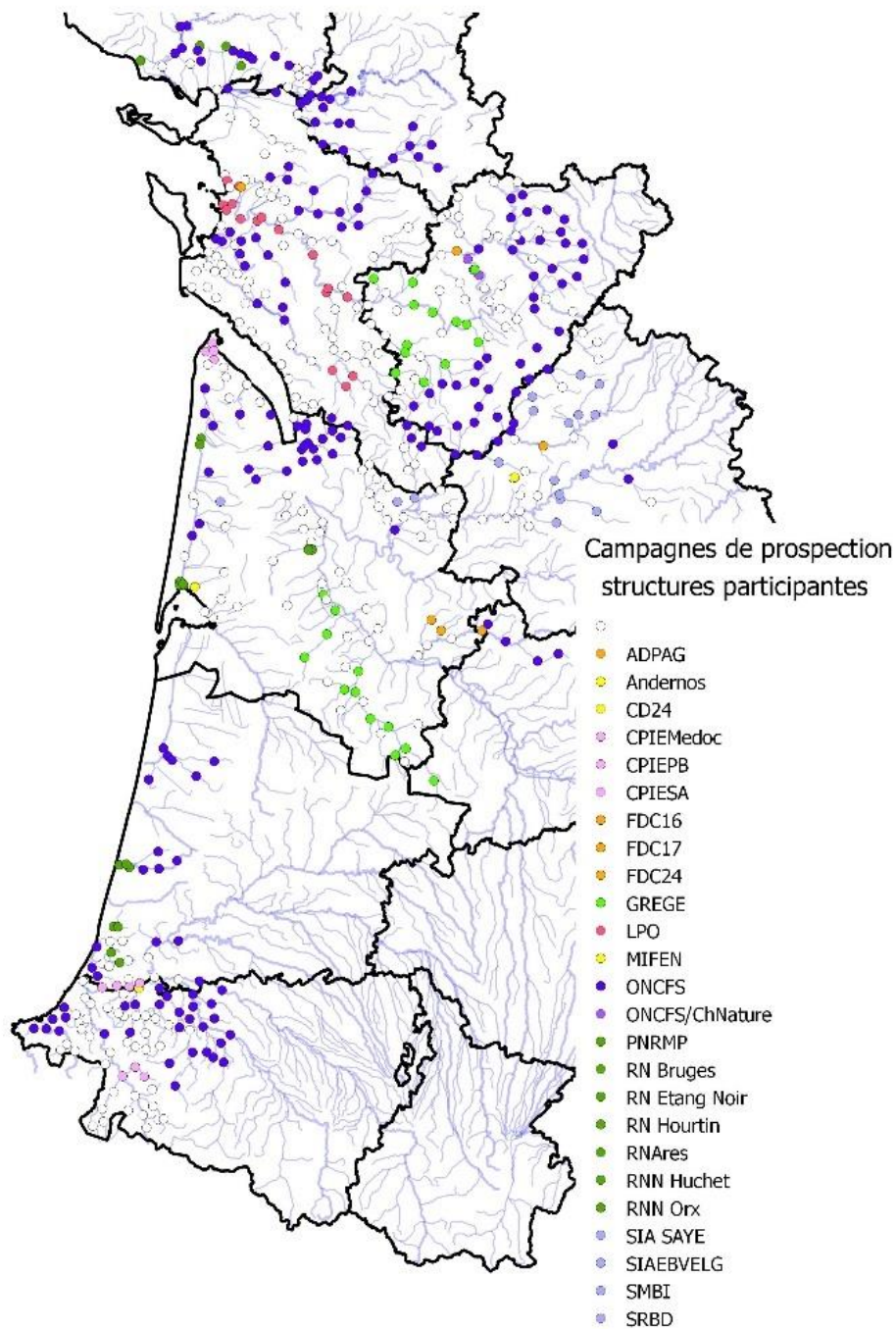
Date de début (journée où les pièges sont tendus) 16/03/2019 Nombre de nuits où les pièges ont été tendus 10

Bilan des captures (préciser l'espèce en cas de capture, 0 si pas de capture, et barrer les cases correspondant à des nuits pièges non tendus)

	Nuit 1	Nuit 2	Nuit 3 <u>⊗</u>	Nuit 4	Nuit 5 <u>⊗</u>	Nuit 6 <u>⊗</u>	Nuit 7 <u>⊗</u>	Nuit 8	Nuit 9 <u>⊗</u>	Nuit 10	Nuit 11
Piège 1	-	-	-	<u>rat</u>	-	-	-	-	-	<u>rat</u>	
Piège 2	<u>rat</u>	-	-	-	-	-	-	-	-	-	
Piège 3	-	-	-	-	-	-	-	-	-	-	
Piège 4	-	-	-	-	-	-	-	-	-	-	
Piège 5	-	-	-	-	-	-	-	-	-	-	
Piège 6	-	-	-	-	-	-	-	-	-	<u>rat</u>	
Piège 7	-	-	-	-	-	-	-	-	-	-	
Piège 8	-	-	-	-	-	-	-	-	-	-	
Piège 9	<u>⊗</u>	<u>rat</u>	<u>rat</u>	-	-	-	-	<u>herisson</u>	-	-	
Piège 10	-	-	-	-	-	-	-	-	-	-	

⊗: détente
⊗: changement appât

Page 1 sur 2 

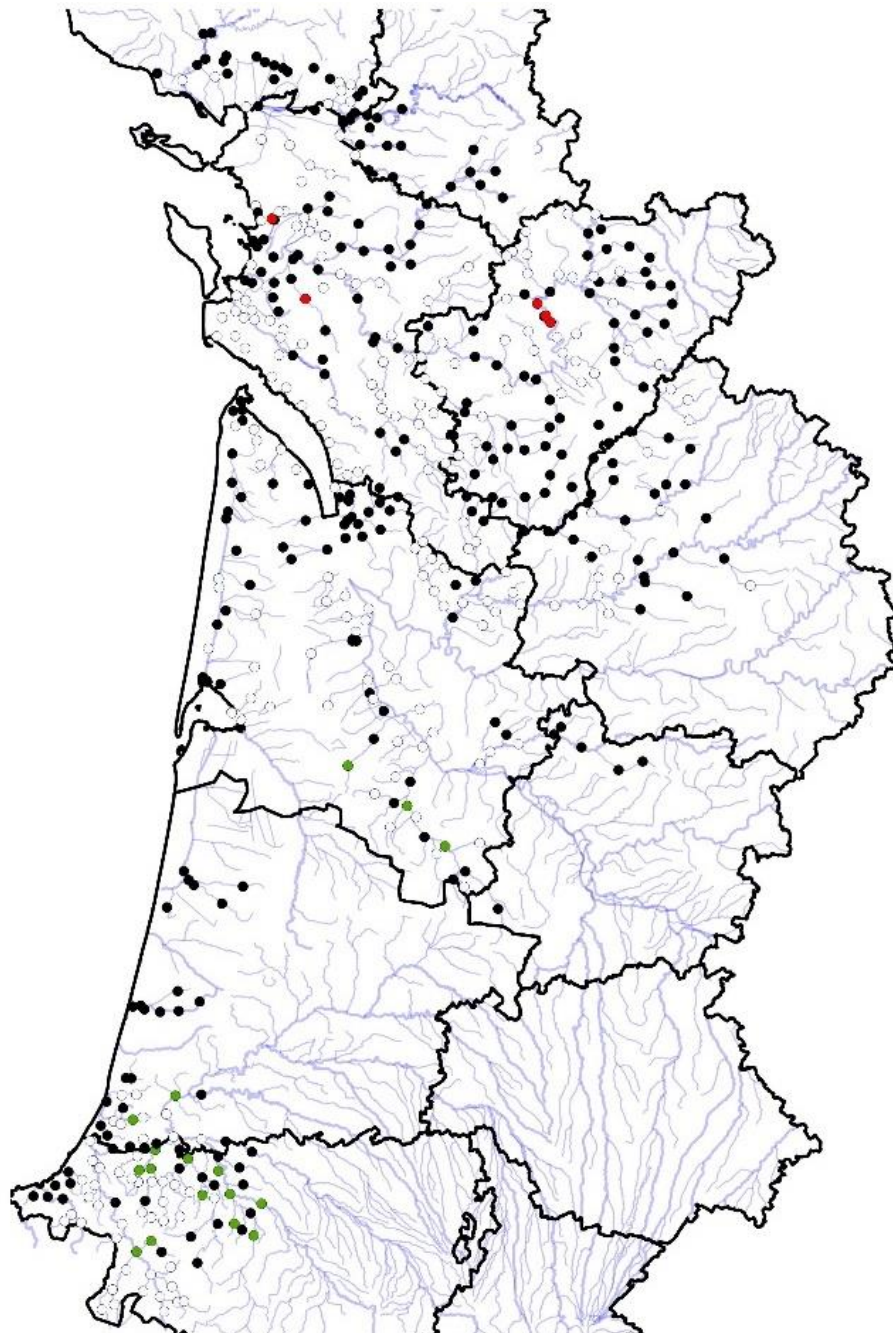


Year	Number of realized prospectings	Number of prospecting nights
2015	0	0
2016	36	3038
2017	126	11 066
2018	117	11 308
Total	279	25 412



$$279/519 = 54\%$$

Prospecting results from January 1st 2015 and December 31st 2018:



○ Campaigns not realized

● Negative campaigns

● 10 captured European minks

2 ♂ and 1 ♀ in 2017

3 ♂ and 4 ♀ in 2018

} PNAi + LIFE

● 20 American minks (in 17 prospectings)

→ Immediate euthanasia on the spot



Objective 1: Monitoring within the PNAi application area

Action n°123: Start the first phase of monitoring campaigns with different methods

1) Targeted prospectings:

Prospecting results from January 1st 2015 and December 31st 2018:





Objective 1: Monitoring within the PNAi application area

Action n°123: Start the first phase of monitoring campaigns with different methods

2) Other tested methods:

Connaissance & gestion des espèces

Vers une nouvelle méthode de détection des espèces de mammifères semi-aquatiques : étude pilote et approche « Metabarcoding ADNe »



**JULIEN STEINMETZ¹,
SANDRINE RUETTE²,
THOMAS RUYS³,
PAULINE JEAN⁴,
TONY DEJEAN⁴**

¹ ONCFS, Délégation régionale Occitanie, cellule technique Sud-Ouest – Toulouse.
² ONCFS, Direction de la recherche et de l'expertise, Unité Prédateurs et animaux déprédateurs – Brieux.
³ Citadule Nature – Chemin du Moulinat, 33185 Le Haillan.
⁴ SPV GZV – 17, rue du Lac Saint-André, 73370 Le Bourget-du-Lac.

Le développement de techniques permettant la détection de fragments d'ADN présents dans l'environnement ouvre des perspectives nouvelles pour l'étude et le suivi de la biodiversité. Ces méthodes d'investigation de pointe ont déjà donné des résultats très prometteurs pour de nombreux groupes d'espèces en milieu aquatique. Devant les attentes d'amélioration des connaissances sur la répartition de certaines espèces de mammifères, notamment le vison d'Europe, nous avons cherché à évaluer les possibilités d'application de ces techniques au groupe des mammifères semi-aquatiques.

Connaissance & gestion des espèces | 11

- Environmental DNA

- Genetic analysis from water samples
- Search of 12 semi-aquatic mammals species

→ Results: Unsuccessful method for now (effort sampling, cost, detectability) to identify European mink, American mink and polecat



Objective 1: Monitoring within the PNAi application area

Action n°123: Start the first phase of monitoring campaigns with different methods

2) Other tested methods :



- Environmental DNA
- Detection dog for European and American minks detection

PNAi

Undergoing tests

- Enticed camera traps
- Hair-traps
- Print-traps

**LIFE
Vison**



Objective 1: Monitoring within the PNAi application area


Action n°124: Characterize the identified European mink populations hearts

- Within the PNAi:
 - Potential information via genetic analysis (waiting for results)
 - No specific implementation because not ended action n°123
- Within the LIFE Vison program:
 - 7 European minks (from 16 and 17 departments): identification electronic chip




Objective 1: Monitoring within the PNAi application area

	N° action	Priority	Actions
Use existing data	111	1	Database management European mink, European polecat, American mink
	112	1	Concerted use of partners' available data
Characterization of European mink populations hearts	121	1	Organize the data providers networks to stimulate the feedback of opportunistic information (accidental trapping, observations, dead minks)
	122	1	Use of the genetic tool to identify the European mink species
	123	1	Start the first phase of monitoring campaigns with different methods
	124	2	Characterize the identified European mink populations hearts

 Full implementation or continue

 Partial implementation

 Not implemented



Objective 2: Fight against the factors of threat in nature



Objective 2: Fight against the factors of threat in nature

	N°action	Priority	Actions
Limit mortality due to fight against pests	211	1	Limit European mink mortalities by improving the efficiency of points of contact network
	212	1	Strive to a right balance between the local implementation of public policies and European mink conservation issues
Fight against American mink	221	1	Updating the American mink distribution from existing data
	222	1	Assemble, reactivate and animate networks for trapping and fighting against American mink
	223	1	Organise the implementation of a targeted action to fight against American mink in predefined areas
	224	2	Organise operations to eliminate American minks in the priority river basin sub-sectors
	225	1 or 2	Reactive fight in case of discovery of a new core of American minks threatening European mink populations
	226	-	Secure active American mink farms



Objective 2: Fight against the factors of threat in nature

	N°action	Priorités	Actions
Habitat improvement	231	1	Limit harmful habitat management actions for the European mink
	232	1	Limit the death risks due to road collisions



Objective 2: Fight against the factors of threat in nature

Action n° 211: Limit European mink mortalities by improving the efficiency of points of contact network

- Revitalise departmental points of contact network (n=240)
 - Writing of a procedure for the points of contact to identify mustelids species
 - 6 trainings carried out in 2018 for 8 departments (85, 79, 16, 17, 33, 24, 40, 64)
 - Update of the members official lists





Objective 2: Fight against the factors of threat in nature

Action n° 212: Strive to a right balance between the local implementation of public policies and European mink conservation issues

- In 2016, the CNCFS assented for the maintenance of the « mink's hole »
- Bromadiolone > 2015 distance from rivers
- American mink listed as « Invasive Alien Species »
 - Europe, not in 2017 (maybe in 2019)
 - Metropolitan France, yes in 2018



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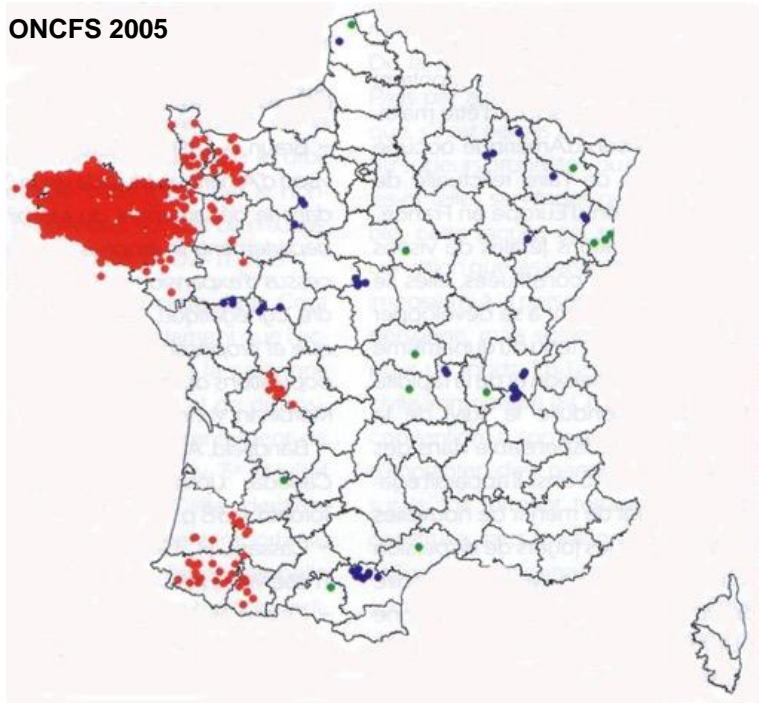


Objective 2: Fight against the factors of threat in nature

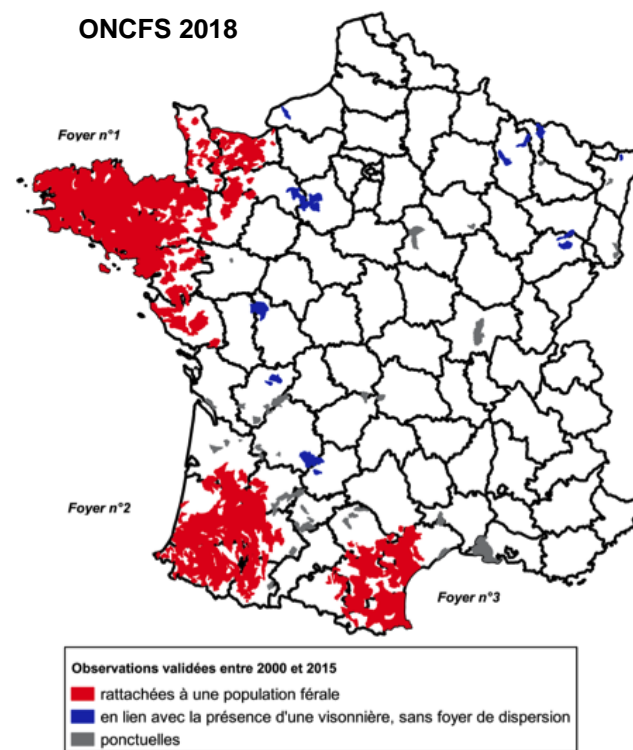
Action n° 221: Updating the American mink distribution from existing data

- Evolution of the American mink distribution (2005-2015)

ONCFS 2005



ONCFS 2018





Objective 2: Fight against the factors of threat in nature

Action n° 222: Assemble, reactivate and animate networks for trapping and fighting against American mink

- Since 2018 > participation of some trappers at « mink points of contact » trainings
- Specific training for trappers proposal with hunting federations



© ONCFS



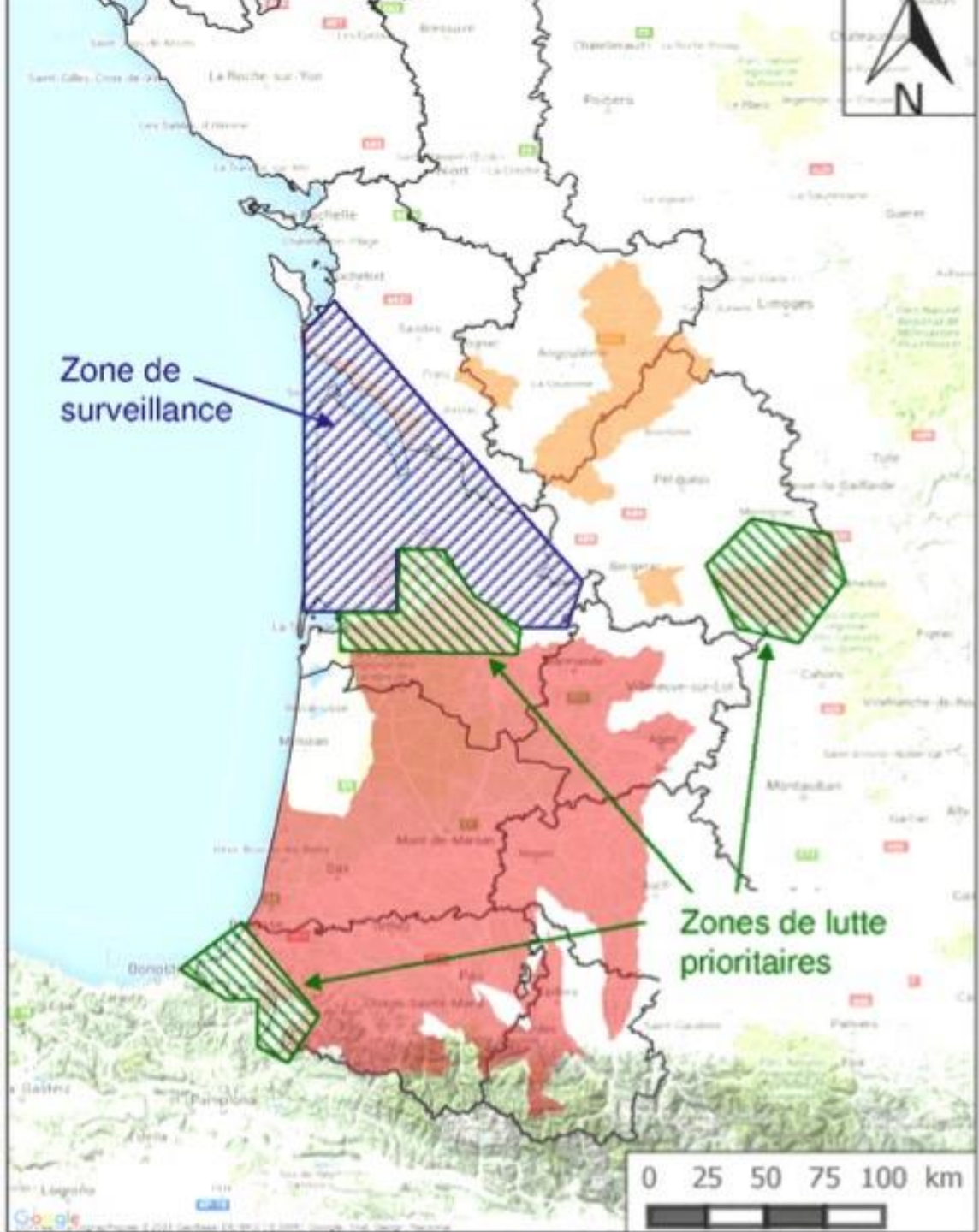
Objective 2: Fight against the factors of threat in nature

Action n° 223: Organise the implementation of a targeted action to fight against American mink in predefined areas

- 2015: Bibliographical study, feasibility study of fight against the American mink (ONCFS)
- 2016: Methodological basis of fight against the American mink with « print rafts »
- 2017: Update of the fight protocol
- 2017-2018: Positioning of rafts



➤ Illustration of the fight methodology frame

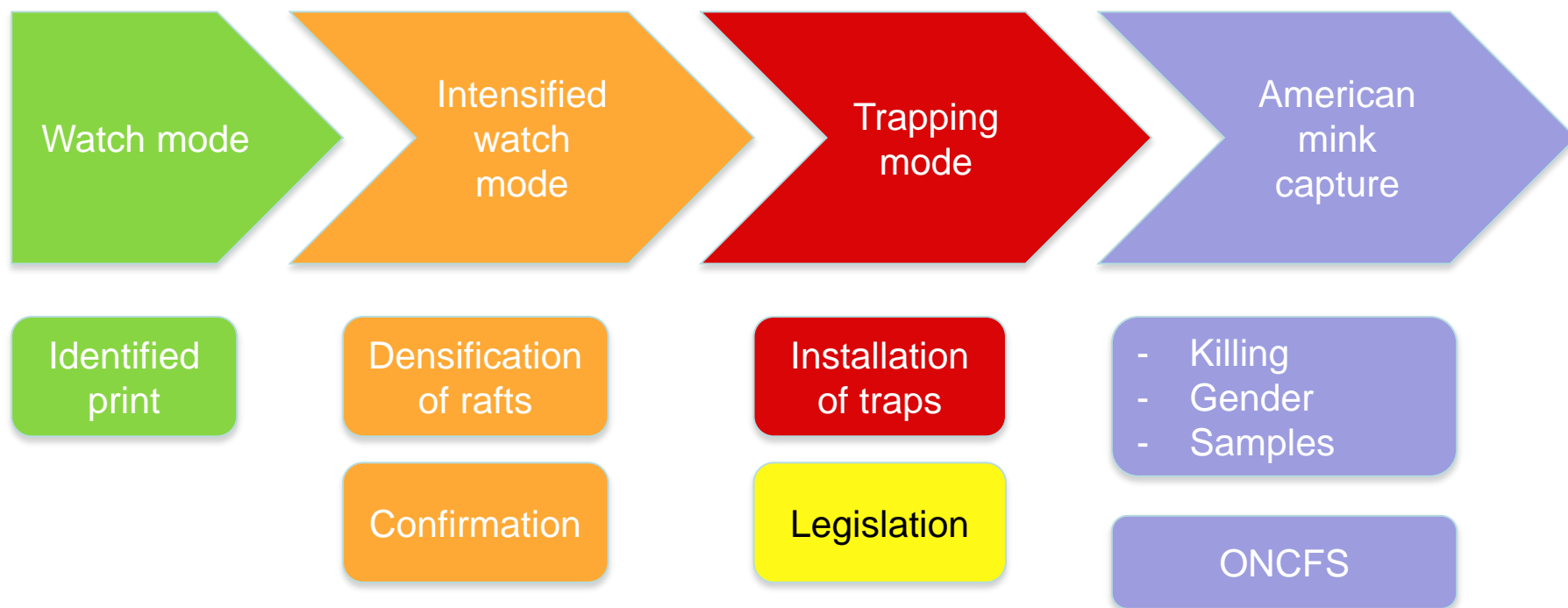




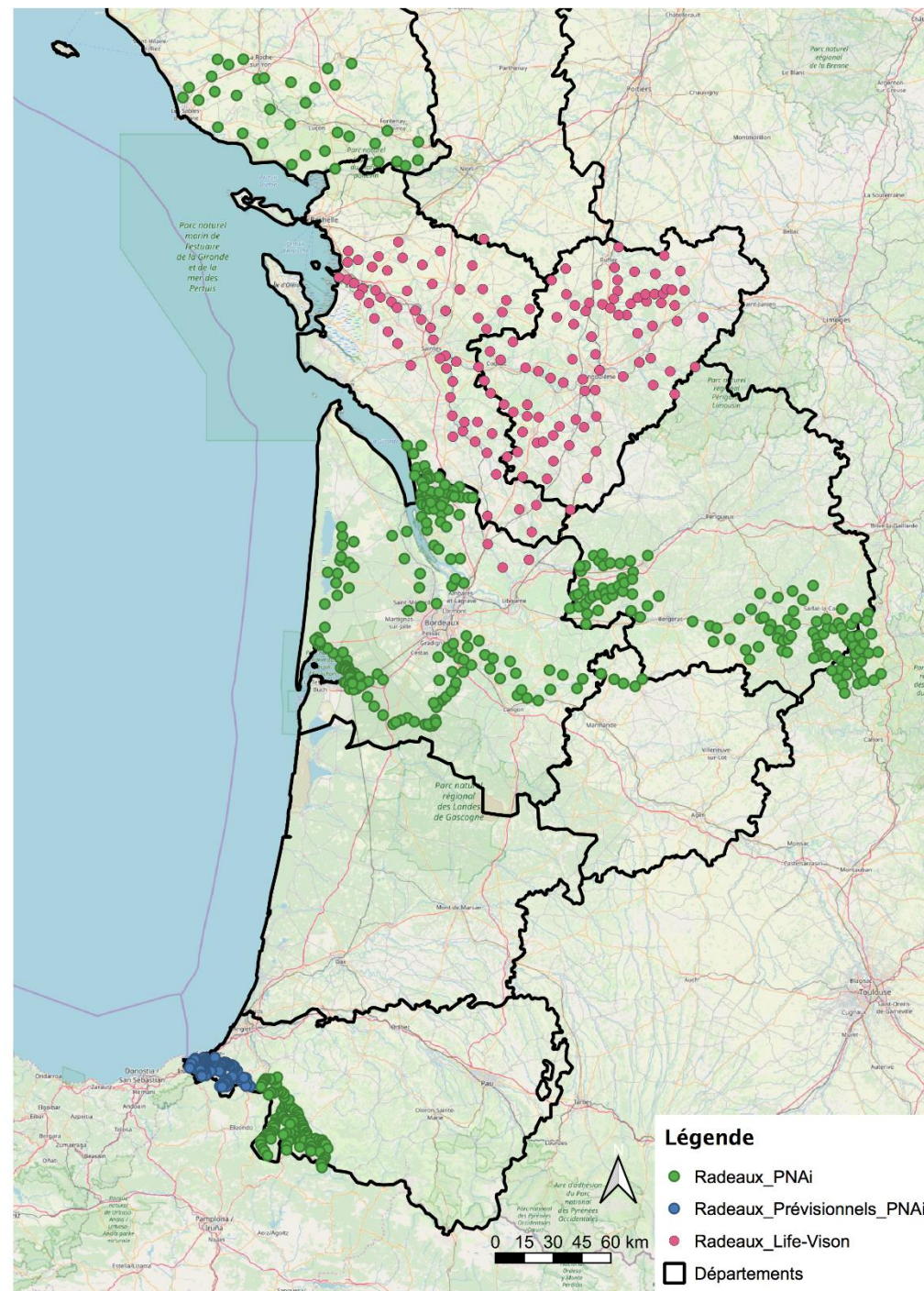
Objective 2: Fight against the factors of threat in nature

Action n° 223: Organise the implementation of a targeted action to fight against American mink in predefined areas

➤ Current fight protocol



➤ General
localisation of rafts





Objective 2: Fight against the factors of threat in nature

Action n° 223: Organise the implementation of a targeted action to fight against American mink in predefined areas

➤ **Assessment of rafts monitoring 2016 - 2018**

PNAi areas	Nb of rafts	Nb of positive	Nb of captures
Gironde / Ouest Dordogne	269	36	7
Est Dordogne	82	10	0
Sud-PA	101	66	0
(Vendée)	35	0	0
Total	487	112	7



Objective 2: Fight against the factors of threat in nature

Action n° 224: Organise operations to eliminate American minks in the priority river basin sub-sectors

- No European mink data in the American mink areas (PNAi, between 2015 and 2018) → **No intervention**



New European mink data on 06/03/2019 in Bayonne

Action n° 225: Reactive fight in case of discovery of a new core of American minks threatening European mink populations

- Implementation of rafts' monitoring at the end of 2018 (effective in January, 2019)
- No trapping phase initiated



Objective 2: Fight against the factors of threat in nature

Action n° 226: Secure active Amercian mink farms

- Evolution of the number of American mink farms (2013-2018)

	2013	2016	Dec. 2018
Nb of farms in France	20	10	7
Nb of farms in PNAi zone	6	4	2

- Farm of 79 department: last inspection in 2017, in compliance with requirements (double fences, set of traps)
- Farm of 64 department :
 - 2012: « Classified Facility for Environmental Protection » (ICPE), only DDCSPP 64 is authorised to control
 - 2017: First inspection by appointment (15 points: installations design, animal welfare, stormwater management, food...)
 - 2018: DREAL/ONCFS demand > Joint inspection **DDCSPP 64 / ONCFS: Corrective observation to be engaged.**



Objective 2: Fight against the factors of threat in nature

Action n° 226: Secure active Amercian mink farms

- 2018: ONCFS has carried out a protocol of control on the porosity of farms
 - MTES demand ONCFS – DREAL inspection (Fight against invasive species policy)
 - Organisational meeting underway, objective to control at the end of 2019



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Objective 2: Fight against the factors of threat in nature

Action n° 231: Limit harmful habitat management actions for the European mink

- « Good practices » guide for the European mink conservation not updated
- List of « risk practices » for the European mink not done
- Recruitment of a policy officer in November 2018
 - Responses to Natura 2000 managers requests
 - Contact mail to managers



Objective 2: Fight against the factors of threat in nature

Action n° 232: Limit the death risks due to road collisions

Main actions carried out and results:

- 2016: Methodology for hierarchical mapping of collisions black points minks – road infrastructures (CEREMA SO)

- 2018: Will to act concretely > prioritisation of action areas > **Gironde**

- Synthesis work under GIS based on data

- CEREMA SO
- Collisions ONCFS
- Permeability of civil engineering structures in 16 and 17 (Life Vison)
- Permeability of railway structures for LGV-SEA



- Many exchanges (PNAi – Funders)

- **Choice of 41 structures to be requalified before the end of 2019 with CG 33**



Objective 2: Fight against the factors of threat in nature

	N°action	Priority	Actions
Limit mortality due to fight against pests	211	1	Limit European mink mortalities by improving the efficiency of points of contact network
	212	1	Strive to a right balance between the local implementation of public policies and European mink conservation issues
Fight against A. mink	221	1	Updating the American mink distribution from existing data
	222	1	Assemble, reactivate and animate networks for trapping and fighting against American mink
	223	1	Organise the implementation of a targeted action to fight against American mink in predefined areas
	224	2	Organise operations to eliminate American minks in the priority river basin sub-sectors
	225	1 or 2	Reactive fight in case of discovery of a new core of American minks threatening European mink populations
	226	-	Secure active American mink farms



Objective 2: Fight against the factors of threat in nature

	N°action	Priorités	Actions
Habitat improvement	231	1	Limit harmful habitat management actions for the European mink
	232	1	Limit the death risks due to road collisions



Full implementation
or continue



Partial implementation



Not implemented



Objective 3: Conservation and breeding strategy of the European mink



Objective 3: Conservation and breeding strategy of the European mink

	N° action	Priority	Actions
Definition of a conservation and/or reinforcement strategy	311	1	Definition of a conservation and/or reinforcement strategy
Launch of the breeding center	321	1	Definition of transfer arrangements
	322	1	Rapid provision of animals
Preparation of the possible releases	331	2	Identification of potential release territories
	332	2	Preparation of the chosen territories



Objective 3: Conservation and breeding strategy of the European mink

Action n°311: Definition of a conservation and/or reinforcement strategy

- At the end of 2014, synthesis of reintroduction strategies and feedback
 - Technical, financial, human resources etc.
 - Germany, Estonia, Spain etc.

Scénarios de stratégie de conservation pour le futur élevage de
Visons d'Europe au parc animalier Zoodyssée à Chizé, France





Objective 3: Conservation and breeding strategy of the European mink

Action n°311: Definition of a conservation and/or reinforcement strategy

- A the end of 2014, synthesis of reintroduction strategies and feedback
- April 16th, 2015, external audit
 - National : M.Sarrazin, M.Steinmetz, Mme.Guinot-Ghestem, M.Moutou, M.Devillard
 - International : M.Maran, M.Podra, M.Michaux

Rapport d'audit sur la

**«Proposition de stratégie de conservation du Vison d'Europe
Mustela lutreola associée à l'élevage en France »**

présentée par Julien Steinmetz le 1^{er} juin 2015

Cet audit s'est déroulé en plusieurs étapes. Un premier échange entre François Sarrazin (Université Pierre et Marie Curie, CS ONCFS), Julien Steinmetz (DIR Sud-Ouest, ONCFS) et Murielle Guinot-Ghestem (CNERA PAD, ONCFS) a eu lieu le 16



Objective 3: Conservation and breeding strategy of the European mink

Action n°311: Definition of a conservation and/or reinforcement strategy

- At the end of 2014, synthesis of reintroduction strategies and feedback
- April 16th, 2015, external audit
 - National : M.Sarrazin, M.Steinmetz, Mme.Guinot-Ghestem, M.Moutou, M.Devillard
 - International : M.Maran, M.Podra, M.Michaux
- July 3rd, 2015, audit by the ONCFS Scientific Council
- September 10th, 2015, results sent to the Ministry



Objective 3: Conservation and breeding strategy of the European mink

Action n°311: Definition of a conservation and/or reinforcement strategy

- May 27th 2016, the CNPN assent the proposed strategy (with PNAi)

Proposition de stratégie de conservation du Vison d'Europe
Mustela lutreola associée à l'élevage en France



- Several scenarii presented but no settled choice
- To be discussed within the PNA 3



Objective 3: Conservation and breeding strategy of the European mink

Action n°321: Definition of transfer arrangements

- Within the PNA 2: building of the European mink breeding center in Zoodyssée (Villiers en Bois, Deux-Sèvres) → finished in 2014

Financers → Regional Council, Department Council of Deux-Sèvres, FEADER





Objective 3: Conservation and breeding strategy of the European mink

Action n°321: Definition of transfer arrangements





Objective 3: Conservation and breeding strategy of the European mink

Action n°321: Definition of transfer arrangements

- Within the PNA 2: building of the European mink breeding center in Zoodyssée (Villiers en Bois, Deux-Sèvres) → finished in 2014
 - March 2014, tasks assignment: DREAL NA, Zoodyssée, ONCFS
- Objective: bringing European mink from Estonia via the « European Endangered species Project » (effective comptability of health, genetic and regulatory conditions)





Objective 3: Conservation and breeding strategy of the European mink

Action n°322: Rapid provision of animals

- 20 and 21 March 2015: arrival of the EEP coordinator (Tiit Maran) in Zoodyssée





Objective 3: Conservation and breeding strategy of the European mink

Action n°322: Rapid provision of animals

- 20 and 21 March 2015 : arrival of the EEP coordinator (Tiit Maran) in Zoodyssée
- April 2nd 2015, arrival of 2 European mink from the Calviac Zoological Reserve





Objective 3: Conservation and breeding strategy of the European mink

Action n°322: Rapid provision of animals

- 11 and 12 May 2017: ONCFS participates in the « Long Term Management Plan of European Mink » drafting (Romania)





Objective 3: Conservation and breeding strategy of the European mink

Action n°322: Rapid provision of animals

- 11 and 12 May 2017: ONCFS participates in the « Long Term Management Plan of European Mink » drafting (Romania)
- January 2018: joint visit of Zoodyssée and ONCFS in Spain





Objective 3: Conservation and breeding strategy of the European mink

Action n°322: Rapid provision of animals

Evolution of the number of captive minks:

	Males	Females
2015	1	1
2016	6	4
2017	5	4
2018	6	4



→ No birth (Zoodyssée & Calviac Zoo Reserve)



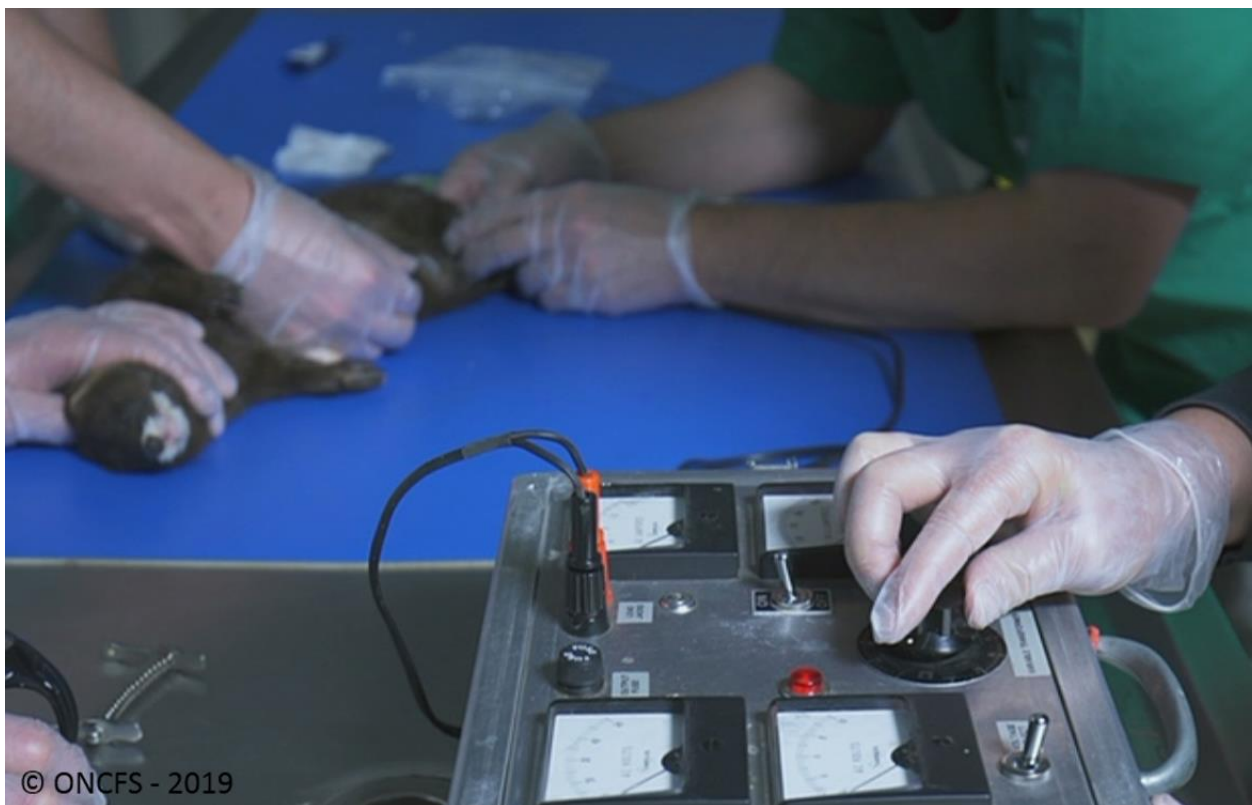
Males with inadequate reproductive behaviour: hyper-aggressiveness or passivity



Objective 3: Conservation and breeding strategy of the European mink

Action n°322: Rapid provision of animals

- May 25th, 2016, artificial insemination attempt:



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Objective 3: Conservation and breeding strategy of the European mink

Action n°331: Identification of potential release territories

- No action implemented

Action n°332: Preparation of the chosen territories

- No action implemented



Objective 3: Conservation and breeding strategy of the European mink

	N° action	Priority	Actions
Definition of a conservation and/or reinforcement strategy	311	1	Definition of a conservation and/or reinforcement strategy
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Preparation of the possible releases	331	2	Identification of potential release territories
	332	2	Preparation of the chosen territories



Full implementation
or continue



Partial implementation






Not implemented



Objective 4: Transversal actions



Objective 4: Transversal actions

N° action	Priority	Actions
41	-	Construction of global financing plan and projects 
42	-	Coordination and interregional animation 
43	-	Communication
44	-	Assessment and PNA 3 writing 



Objective 4: Transversal actions

Action n° 43: Communication

- 7 Colloquium and seminars (40th francophone colloquium on Mammalogy, Oct.2018...)
- 20 communications to partners and public announcements (Festival of the Chevêche, 52 minutes film « Sauvons le Vison d'Europe », booklet/poster...)
- 5 international communications (Oral presentation « Situación del Visón Europeo y el visón Americano in Francia », 2017 ; European Mink Newsletter, 2018)





Objective 4: Transversal actions

N° action	Priority	Actions
41	-	Construction of global financing plan and projects
42	-	Coordination and interregional animation
43	-	Communication
44	-	Assessment and PNA 3 writing



Full implementation
or continue



Partial implementation



Not implemented



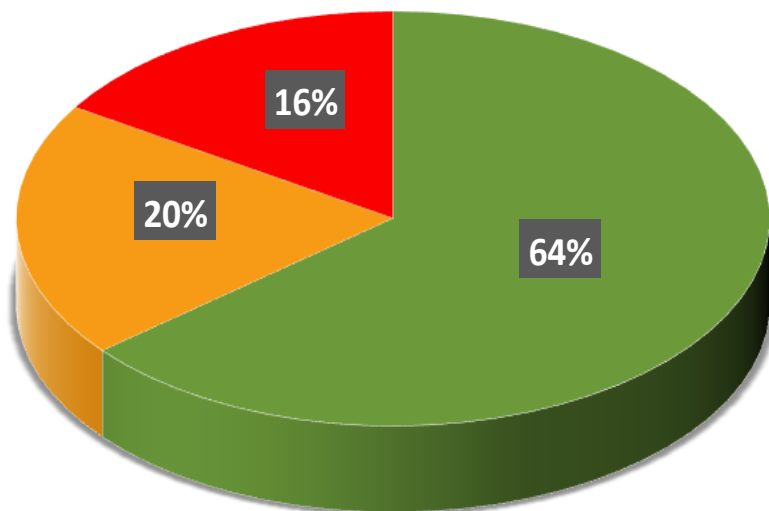
Conclusion



Conclusion the PNAi assessment

Global assessment:

PNAi (2015-2018) = 6 + 10 + 5 + 4 = 25 actions



■ Mise en œuvre totale ou à poursuivre ■ Mise en œuvre partielle ■ Non mise en œuvre



Conclusion the PNAi assessment

Human resources:

Coordinator + Technical and scientific leader + Network leade:

	DREAL NA (ETP)	ONCFS AST (ETP)	Cistude Nature (ETP)
2015	0.1	0.8	0.5
2016	0.1	0.9	0.7
2017	0.2	1	0.7
2018	0.25	1.3	0.95
Total	0.65	4	2.85



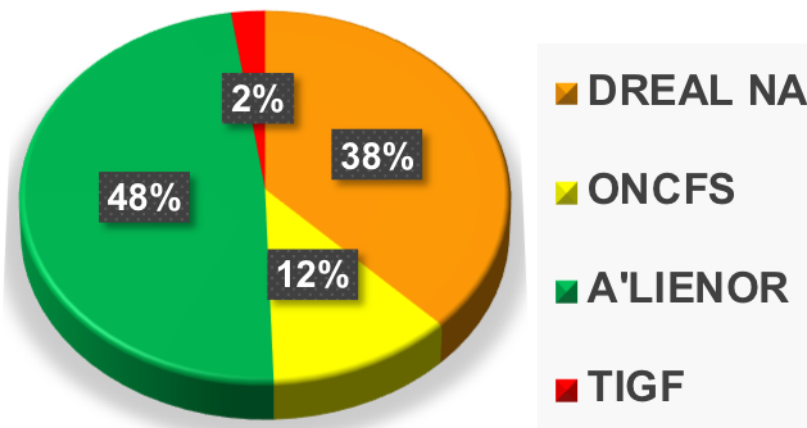
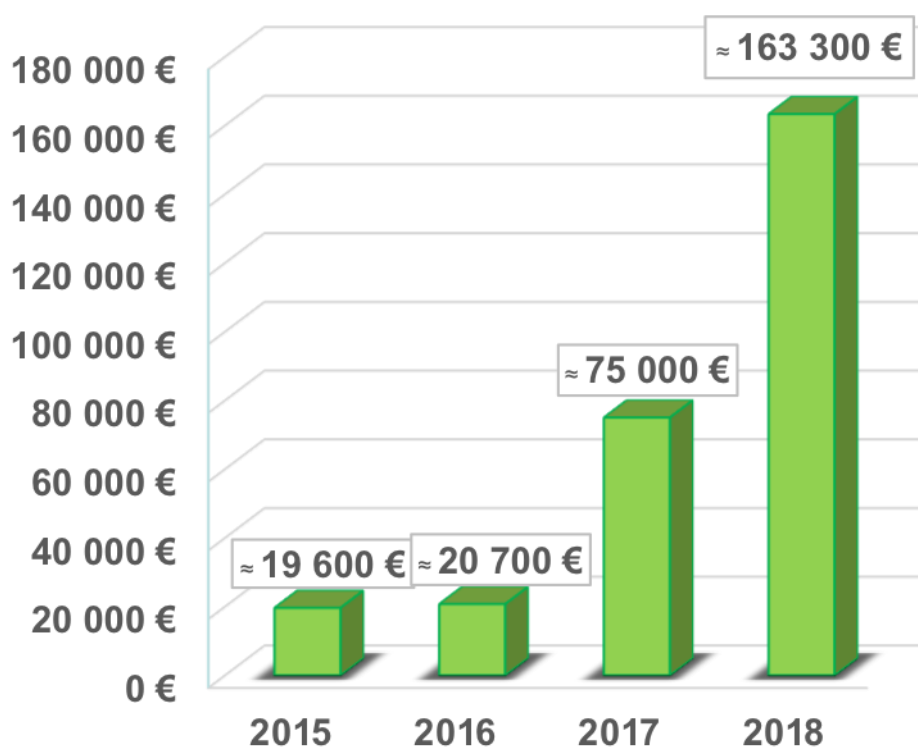
Others actions of the PNAi:

- European mink prospectings: > 8 470 days
- Fight against the American mink: > 278 days



Conclusion the PNAi assessment

Financial assessment:



Total PNAi: 278,704 € (excluding human costs related to animation and coordination)

+ 3,954,771 € for the LIFE Vison

Order of the day

1. PNAi assessment
 1. Presentation of the assessment
 2. Discussion about the assessment
2. Proposed actions for the PNA3
 1. Review of the workings groups
 2. Discussion about PNA3 actions



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Discussion about action of PNA3



All yours!

Order of the day

- 1. PNAi assessment**
 - 1. Presentation of the assessment**
 - 2. Discussion about the assessment**
- 2. Proposed actions for the PNA3**
 - 1. Review of the workings groups**
 - 2. Discussion about PNA3 actions**





Review of the working groups

1. « Improving knowledge on the European mink »
 - May, 28th (2h), 7 members of COPIL
2. « Breeding of European mink and conservation strategy »
 - May, 28th (2h), 3 members of COPIL
3. « Communications, Financing »
 - May, 28th (1h30), 4 members of COPIL
4. « Fight against American mink »
 - May, 29th (2h), 13 members of COPIL
1. « Fight against other threat factors »
 - May, 29th (2h), 15 members of COPIL



Review of the working groups

5 Objectives = 13 actions = 35 sub-actions

1. Improving knowledge on the European mink
2. European mink *ex situ* conservation
3. Limiting the impact of American mink on European mink
4. Fight against others threats factors on the European mink in nature
5. Communication and training on European mink and PNA3 actions

Order of the day

- 1. PNAi assessment**
 - 1. Presentation of the assessment**
 - 2. Discussion about the assessment**
- 2. Proposed actions for the PNA3**
 - 1. Review of the workings groups**
 - 2. Discussion about PNA3 actions**





Discussion about action of PNA3



All yours!



Thanks for
your
attention!

Thanks to
all partners!

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