

The actors of the programme

Four french organizations join their skills in order to support the programme:

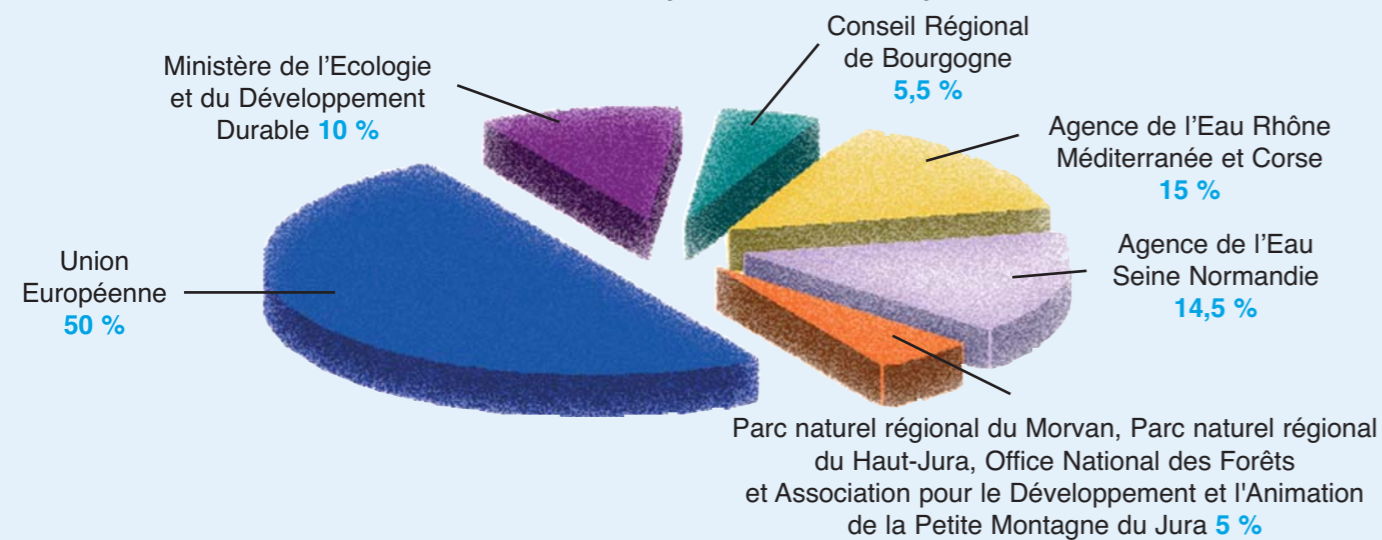
- Parc naturel régional du Morvan - beneficiary
- Office National des Forêts (Bourgogne, Champagne-Ardenne et Franche-Comté)
- Parc naturel régional du Haut-Jura
- Association pour le Développement et l'Animation de la Petite Montagne du Jura

With technical participation of:

- Conseil Supérieur de la Pêche
- Directions Régionales de l'Environnement de Bourgogne et de Franche-Comté
- Fédérations Départementales des Associations de Pêche et de Protection des Milieux Aquatiques
- Société d'histoire naturelle d'Autun
- Reserves naturelles du Ravin de Valbois et du Lac de Remoray
- Syndicat mixte de la Loue
- Communauté de communes des côteaux de la Haute-Seille
- Universités de Franche-Comté, de Bourgogne et Lyon I
- Laboratoire Départemental d'Analyses du Jura
- Centre Régional de la Propriété Forestière de Franche-Comté
- Stakeholders of the ten Natura 2000 sites
- Directions Départementales de l'Agriculture et de la Forêt
- Chambres d'Agriculture

Financing

An investment of **3.224.142 euros** over 5 years financed by:



Composition: LIFE staff (PNRM), Making-up: C. Lebourg (PNRM), Covers pictures: White Clawed Crayfish, forest stream on limestone rocks, open-land stream on metamorphic rocks, L. Paris (PNRM) - Pearl Mussel, G. Cochet (MNHN). Printed by CBI Luzzy - april 2005

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Headwater streams and faunistic heritage associated

European plan in favour of natural habitats

2004-2009



Implemented by :



An action plan for streams in Burgundy and Franche-Comté

Protecting a natural heritage that became extraordinary ...

European headwater streams are the last shelters of species once widespread, such as White-Clawed Crayfish and Pearl Mussel. Owing to their small size and the lack of knowledge on their social, economical and ecological roles, these habitats are often disregarded in planning decisions. Moreover, impacts of human activities (agriculture, forestry, urbanization...) are often underestimated and still not well known.

How can we conciliate human activities in rural areas with the preservation of these natural habitats in long term? What means and techniques are the more efficient?

These are the stakes of this programme concerning about fifty kilometres of brooks spread over 10 Natura 2000* sites in Burgundy and Franche-Comté districts in France.



Crossing system preventing damages on streams during timber harvesting operations

Testing practices of sustainable development on streams and surrounding habitats

The aim is to acquire tested devices of preservation and restoration of the water quality and of habitats linked to brooks, in partnership with land-owners, managers and users of the sites.

The actions will have to improve the living conditions of the four main species of Community interest linked to these habitats: White-Clawed Crayfish, Pearl Mussel, Brook Lamprey and Bullhead. Indeed, those species which are in decline in Europe are relevant indicators of stream quality.

The experience established thanks this programme can be used again in the future by French and European managers who conduct preservation projects and actions of aquatic systems, especially on the Natura 2000 network.



S. Dernier (photothèque CSP)

The Brook Lamprey, a not well-known animal



The Bullhead, a small fish living in pebbly water beds, which is sensitive to water quality



How to conciliate stock-farming and streams preservation?



The American Signal Crayfish : a danger for local species...



...especially for the White-Clawed Crayfish

To protect, improve, manage and inform

Four means to reach those objectives:

Protecting and physically restoring the habitats

- Considering streams in forestry operations and in farming practices
- Buying grounds in order to restore them and establish a long-lasting management
- Rehabilitating the free movement of the aquatic fauna

Maintaining and improving water quality

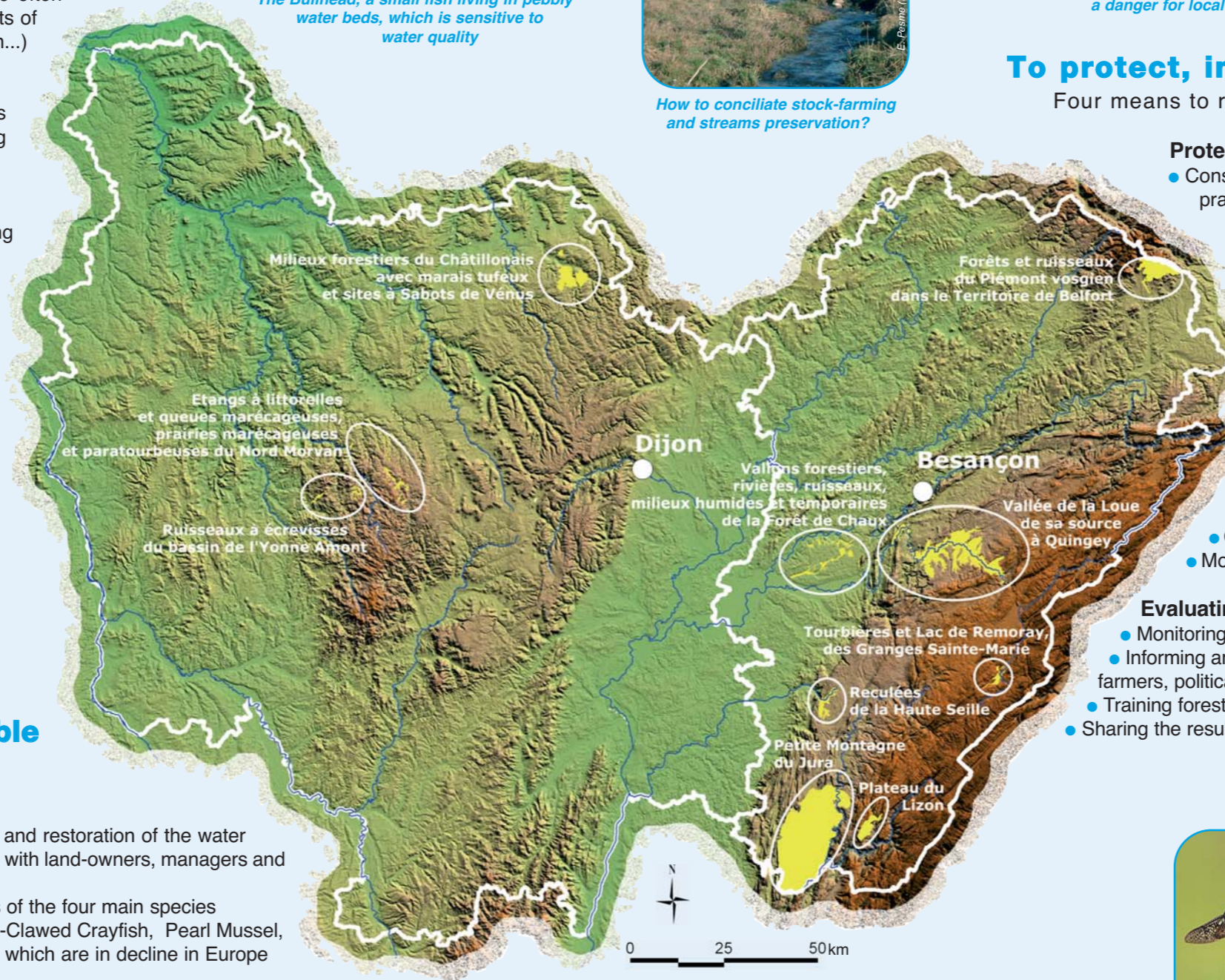
- Setting-up waste water treatment adapted to the fragility of these habitats
- Controlling impacts of reservoirs and ponds

Managing crayfishes populations

- Increasing knowledge about the ecology of these populations
- Attempting to reintroduce White-Clawed Crayfish
- Controlling alien species of crayfishes
- Monitoring the colonization by crayfishes populations

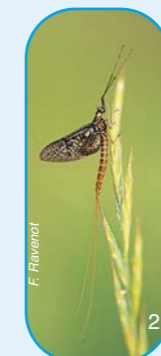
Evaluating and communicating the outcomes

- Monitoring the return of species and the evolution of aquatic habitats
- Informing and increasing the awareness of the general public, land owners, farmers, political representatives and local actors
- Training forest technicians
- Sharing the results with local technicians and European managers



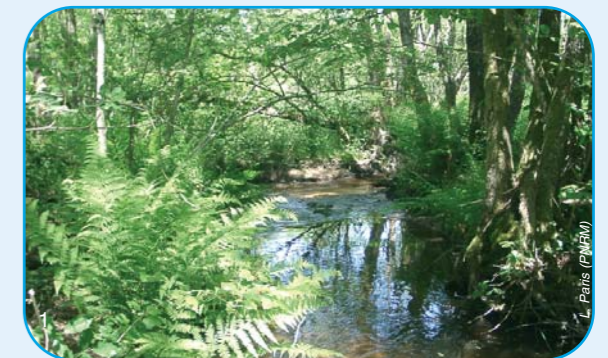
The 10 Natura 2000* sites of intervention in Burgundy and Franche-Comté (France)

* Community important sites (CIS) will integrate Natura 2000 network because they involve an exceptional natural heritage that European community countries committed themselves to preserve through the adoption of the Habitats Directive in 1992.



F. Reverot

2



L. Paris (PNRM)



E. Pesme (PNRM)

3

Actions will be in favour of overall ecosystems, habitats and species : forest of alders and ashes on the stream banks ⁽¹⁾, insects with partial aquatic development ^(2,3)...