


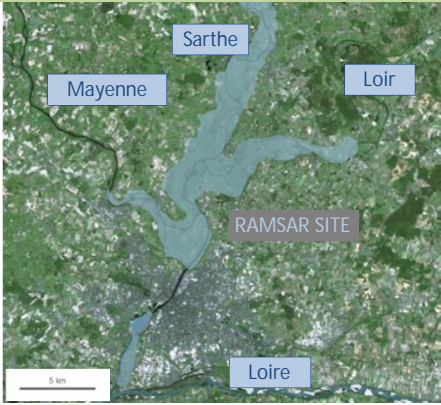
**Basses vallées angevines  
Flood meadows of Angers**

A French case study in  
high nature value farming

Josephine Pithon




The largest confluence of the River Loire




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Extensively grazed or mowed since the Middle Ages




Flooded meadows in February  
E. Séchet



Haymaking in June / July  
E. Séchet




Poplar plantation and meadow  
E. Séchet




Limousine cattle  
J. Pithon

Nature conservation in the flood meadows  
*Winter and early spring*





Waterbirds in the flooded meadows in late winter (February)  
E. Séchet





Black-tailed Godwit  
A. Fossé

Nature conservation in the flood meadows  
*Late spring and summer*



Snake's head fritillaries  
flowering in April  
J. Pithon

Hedge hyssop flowering  
in July  
E. Séchet





Nature conservation in the flood meadows  
*Late spring and summer*

Whinchat and yellow wagtail (left):  
typical species of wet grassland in  
the breeding season  
A. Fossé

Longhorn beetles live in old ash  
trees traditionally coppiced for  
firewood production  
E. Séchet



**Corncrake *Crex crex* : « umbrella species ? »**




Corncrake adult in the hand (left) E. Sèchet  
Ringing and measuring (below) A. Fosse



The corncrake population is closely monitored by annual counts of singing males.

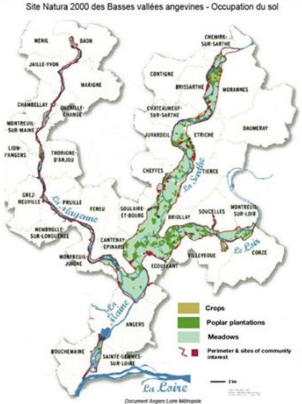
**Decline in the number of singing male Corncrakes in France from 1930-1940 to 2009**



**Distribution of singing male Corncrakes in France, 2009**

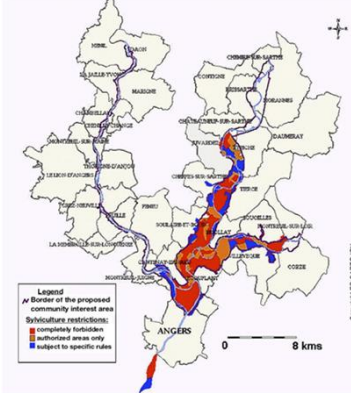

Source: Deceuninck B. (2011) Statut du Râle des genêts *Crex crex* en France en 2009. Distribution, effectifs et tendance *Ornithos* 18-1 : 11-19 (Reproduced with permission)

**Agri-environment schemes and the Natura 2000 site**



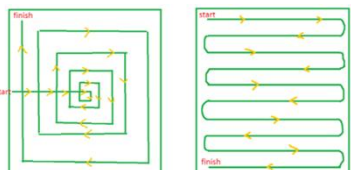
Extent of Natura 2000 area (in red) and the distribution of three land cover types

**A successful Natura 2000 negotiation**





**Support for wildlife-friendly management through Agri-Environment Schemes (AES)**

- Extensive grassland management
  - limited use of fertilizer
  - lower stocking rates
- Maintenance of hedgerow networks
- Preservation and maintenance of older trees and dead wood
- Wildlife-friendly mowing
  - later mowing dates
  - mowing from centre outwards (pictured)



**A series of changing Agri-Environment Schemes**



Late mowing allows ground-nesting birds to finish breeding

1992 / OLAE → 1999 / CTE → 2002 / CAD → 2007 / MAET → 2014 / MAEC

E. Sèchet

### Local commercialisation and a labelling scheme

1997: Concerns about the future of livestock farming in the flood meadows

2001: "Angers Valleys Livestock Farmers Association" founded

2004: Registered trademark, publicity and promotion film made

2005: Difficulties in establishing regular production and sales

2008- - ? : Collaborative work between local wildlife protection association, agriculture extension services, farmers and meat sector

2018: 11 farmers, 6 sales points



The Farmers' promise:

- Conservation management of natural flood meadows;
- Feed livestock on grass/hay;
- Practice extensive agriculture & respect animals' well-being ;
- Practice wildlife friendly mowing
- Refrain from using pesticides in the flood meadows

### Successes of this flood meadow farming system

- Natura 2000 provides a good general protection framework, supported by the Agri-Environment Schemes;
- Flood meadows maintain high levels of biodiversity including declining or threatened species;
- "Angers Valleys Livestock Farmers Association" continues to promote their wildlife-friendly agriculture and products;
- A new film (in French) made by the local BirdLife International partner (LPO) describes the current state of affairs.



### Remaining challenges in the flood meadows

- Is agri-environmental action truly effective for biodiversity enhancement ?
- How can AES's fixed mowing dates be staggered to avoid large areas being disturbed simultaneously?
- How can wood from hedgerows be exploited?
- How can aging trees and hedgerows be replaced?
- How can clear-cut poplar stands be effectively converted back to semi-natural grassland?
- How can farmer dependency on on EU payments be reduced?
- How can younger farmers be persuaded to invest in these challenging floodlands?



Old ash trees, traditionally coppiced for firewood  
E. Siché



### The Angers case illustrates HNV farmland issues



Angers are HNV farmlands that exist because they are difficult to farm intensively.

- Farming for biodiversity/nature values is a possible sustainable livelihood strategy in this context.
- Ongoing management requires outside financial support for the environmental services farmers provide.
- Farmers seek more autonomy and the development of local food systems, food labelling schemes, direct sales etc.

### Resources and experts

Research on biodiversity (in particular breeding birds) in the Angers Flood Meadows, published in English:

Fourcade Y., Besnard A.G., Secondi J. 2017. Evaluating interspecific niche overlaps in environmental and geographic spaces to assess the value of umbrella species. *Journal of Avian Biology*. DOI: 10.1111/jav.01153

Besnard A.G., Fourcade Y., Secondi J. 2016 Measuring difference in edge avoidance in grassland birds: the Corncrake is less sensitive to hedgerow proximity than passerines. *Journal of Ornithology*, 157: 515-523.

Besnard A.G., Secondi J. 2014 Hedgerows diminish the value of meadows for grassland birds: Potential conflicts for agri-environment schemes. *Agriculture Ecosystems & Environment* 189, 21-27.

#### Publications in French :

Billaudeau, Valérie & Thureau, Bertille. (2010). « L'éleveur et l'oiseau » : rayonnement d'une démarche agro-environnementale innovante. *Marché et organisations*. 11. 155. 10.3917/maorg.011.0155.

Deceuninck B. (2011) Statut du Rôle des genêts *Crax crex* en France en 2009. *Distribution, effectifs et tendance Ornithos* 18-1 : 11-19

### Resources and experts

#### Local websites

The local farmers' website <http://leleveuretoiseau.wixsite.com/boeuf49>

The local BirdLife International partner website (LPO Anjou) <http://www.lpo-anjou.org/lpo-anjou/sites-especes/>

#### Experts

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This presentation, produced by Joséphine Pithon at ESA Angers (<http://www.groupe-esa.com/>), has been provided for [HNV-Link project](#) to be included into the educational package on High Nature Value farming. Other resources of the education package are available [www.hnmlink.eu](http://www.hnmlink.eu).

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