



# Ruddy duck

(*Oxyura jamaicensis*)

## Programme to eradicate ruddy ducks in the U.K.

### Food and Environment Research Agency (FERA)

■ The agency operates under the supervision of the U.K. department for the environment, food and rural affairs (DEFRA). FERA is active in developing sustainable agriculture, in managing and conserving the environment and in ensuring food safety.

### Context and issues involved

■ Ruddy ducks were introduced to the U.K. in 1949 and the first reproduction in the natural environment was observed in 1960, following the escape of ducks from captivity. In the 1970s and 1980s, the species increased its range in the U.K. and colonised neighbouring countries, notably Spain, where it menaced the white-headed duck through hybridisation.

■ In 2000, the population of breeding ruddy ducks in the U.K. had reached 6 000 and attempts to reproduce had been observed in 7 European countries.

■ The threats weighing on the white-headed duck led to the creation of an action plan requiring the cooperation of all European countries confronted with the ruddy duck in view of its eradication.

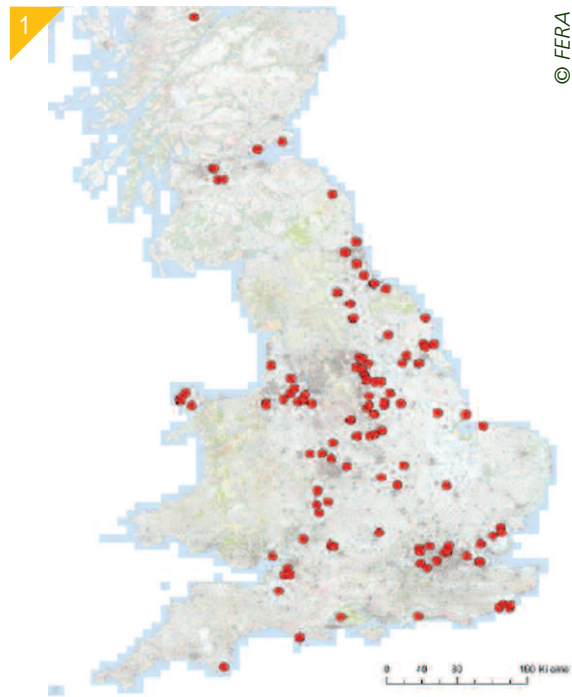
### Interventions

■ In the beginning of the 1990s, when 95% of the ruddy-duck population were concentrated in the U.K., the Wildfowl et Wetlands Trust (which originally introduced the species in 1949) tested from 1993 to 1996 various methods to control the species (different capture methods, shooting techniques, sterilisation of eggs).

■ Fewer than 100 ducks were eliminated and the efforts had no effect on the population.

■ That being said, these preliminary studies determined the best management techniques and the seasons most conducive to their implementation, namely shooting during the breeding and wintering seasons.

■ Eradication was deemed possible on the condition that measures be undertaken on a larger scale.



© FERA

1. Shooting sites.

■ The Food and Environment Research Agency (FERA) assumed responsibility for the work in 1999-2005 and launched two programmes, the first on a regional scale from 1999 to 2002 and the second on the national scale from 2003 to 2005).

■ These programmes served to improve shooting techniques during the wintering season. Each year, between 700 and 900 ruddy ducks were eliminated, leading to a slight decline in the national population.

### ■ European LIFE programme

■ In 2005, FERA obtained a total of 3.3 million pounds (50% LIFE, 50% FERA and a contribution from the Spanish government) for the eradication programme.

The main objectives were to:

- protect the European populations of white-headed ducks by eradicating ruddy ducks from the U.K.;
- share and disseminate information on the control methods and the results of the work to the other European nations in order to enhance the effectiveness of management measures on the European scale.

■ The shooting campaigns launched in the framework of the new programme led to a significant drop in population numbers (6 000 ducks in January 2000, 3 000 in January 2003), however the rate of decline was deemed insufficient. FERA conducted an econometric study and an analysis of project feedback to devise a new strategy optimising the effectiveness to cost ratio. A team of ten people was assigned the full-time job of eradicating the species within five years, from 2007 to 2011.

### ■ Techniques employed

■ Wintering ducks were designated as the priority target in that 80% of the ruddy-duck population gathered on 25 sites during the winter. Management work also concentrated on the sites with high breeding rates.

■ Management techniques during the wintering season:

- shooting from boats or from the shore near the vegetation;
- the ducks are driven close to the shore;
- shooting sessions every 10 to 14 days to avoid having the ducks leave the site definitively;
- pauses were organised during shooting sessions to enable the ducks to regather.

■ Management techniques during the breeding season:

- moderators were used more frequently;
- visits were more frequent, but shorter;
- shooting sessions took place from April to June, prior to the hatching of eggs;
- female ducks were the priority target;
- decoys were used to attract ducks of both sexes.

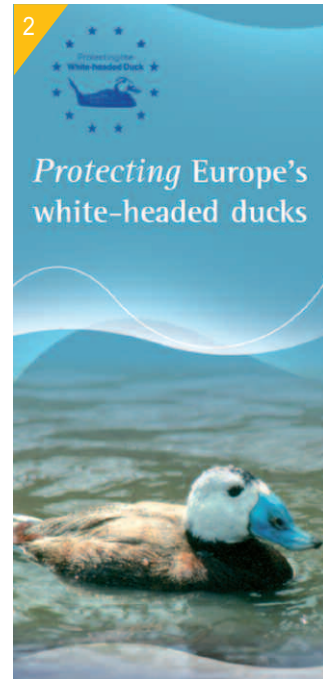
## Results

■ Shooting took place on a total of 132 sites throughout the U.K., with the agreement of all land owners. In 2013, 45 ruddy ducks remained in the U.K. The remaining ducks continued to go to the known wintering sites in spite of the shooting. The population is spread over a few regional sites with 5 to 10 ducks each.

*Results of the shooting trials.*

Programme (time)	Ducks eliminated	Breeding population
First programme 1993-1995	134	6 000
Second programme 1999-2005	5 065	2 000
LIFE programme 2005-2011	7 100	114
2011-2013	124	45
<b>TOTAL</b>	<b>12 557</b>	

■ In addition to the management work, the population of ruddy ducks is counted annually by the Wildfowl and Wetlands trust. In January 2013, 110 sites throughout the U.K. were counted. Counts were also conducted in Ireland.

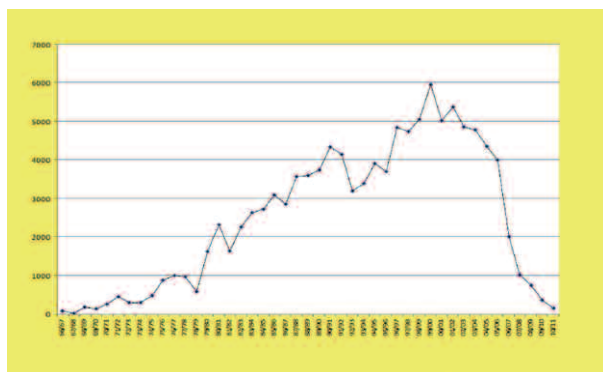


© FERA

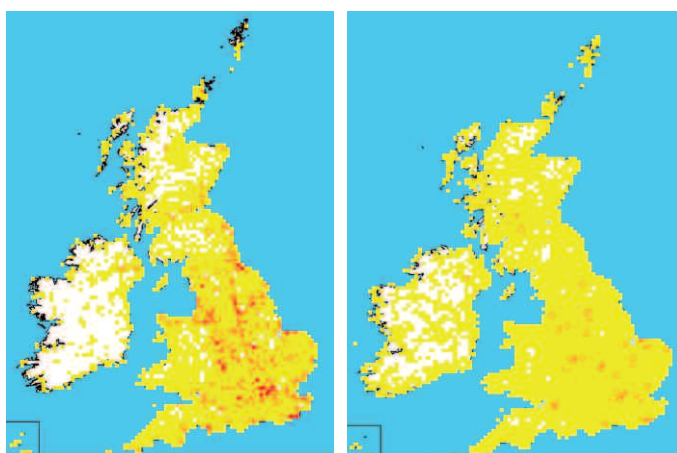


2. Informational brochure.

Numbers of ruddy ducks in the U.K. from 1967 to 2011.  
Source: FERA/WWT.



Distribution of ruddy ducks (red and orange dots) before and after (2013) the management work. Source: FERA.



## Outlook

- The programme will be pursued to achieve full eradication of ruddy ducks in the U.K. by the year 2015, in compliance with the recommendations of the Berne convention.
- Eradication of the species, the objective of projects in other countries (Netherlands, France, Spain), should be achieved if the operations in the U.K. are successful.
- The project for ruddy ducks is an example of European cooperation in managing invasive alien species, an indispensable feature if the efforts in other European countries are to succeed.

## Information on the project

- Efforts to inform and raise the awareness of land owners was required to access and work on key sites.
- The results of the eradication programme were presented during the Fifth Meeting of the parties to the African-Eurasian Waterbird Agreement (AEWA) in La Rochelle, 2012.
- Information is available at the GB Native secretariat ([www.nonnativespecies.org](http://www.nonnativespecies.org)).
- An informational brochure titled *Protecting Europe's whiteheaded ducks* was published to explain the LIFE programme.

Author: Emmanuelle Sarat, IUCN French committee

### For more information

- FERA : <http://www.fera.defra.gov.uk/>
- GB Non-native species secretariat : <http://www.nonnativespecies.org/index.cfm?pageid=244>
- Wildfowl et Wetlands Trust. 2012. *The status of the Ruddy Duck (Oxyura jamaicensis) in the western Palearctic and an action plan for eradication, 2010-2012*. Wildfowl et Wetlands Trust, Slimbridge. 21 pp.
- Conseil de l'Europe. 2013. *Follow-up of recommendation No.149 (2010) on the eradication of the Ruddy duck (Oxyura jamaicensis) in the western Palearctic*. National reports. 13 pp.
- Henderson, I. 2010. « *The Eradication of Ruddy Ducks in the United Kingdom* ». *Aliens: The Invasive Species Bulletin*, no 29: 17-24.
- Henderson, I. 2011. *UK Ruddy duck eradication programme : September 2005 to March 2011*. FERA. 33 pp.
- FERA. 2012. *UK Ruddy duck eradication programme project bulletin*. April 2012. 3 pp.