GLOBAL INVASIVE SPECIES DATABASE

FULL ACCOUNT FOR: ***Oxyura jamaicensis***

Oxyura jamaicensis 正體中文

System: Freshwater_terrestrial

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Aves	Anseriformes	Anatidae

Common name northern ruddy duck (English), Amerikansk skarveand (Danish), stivhaleand (Norwegian), schwartzkopf ruderente (German), rosse stekelstaarteend (Dutch), Amerikansk kopparand (Swedish), ruddy duck (English), gobbo della giamaica (Italian), erismature rouse (French), malvasía cabeciblanca (Spanish), hrókönd (Icelandic)

Synonym *Anas jamaicensis* , Gmelin 1789

Similar species

Summary Oxyura jamaicensis (ruddy duck) is native to North America. It was imported into wildfowl collections in the UK in the 1940s and subsequently escaped to form a feral population from which birds are now spreading as far as Spain, where they threaten the globally endangered white-headed duck (Oxyura leucocephala) with extinction through introgressive hybridisation and competition. A regional trial of control measures, in which over 2,000 birds have been controlled, is ongoing in the UK. Control programmes are also in place in France, Spain and Portugal and are urgently needed in The Netherlands and Belgium. Oxyura jamaicensis are relatively easy to shoot as they tend not to leave water-bodies during control activities.

view this species on IUCN Red List

Species Description
Oxyura jamaicensis (ruddy duck) is a small diving duck with a long tail, often held erect. On an average the females weigh 550g and males around 600g. During the breeding season males can be distinguished from other ducks by a white cheek patch, chestnut red body plumage, and blue bill. Females are distinguished by their body structure and off-white cheek split by a horizontal brown stripe. Both sexes can be distinguished from the white-headed duck by their smaller size, shorter tail, thinner cheek stripe and concave bill profile.

Notes
Oxyura jamaicensis (ruddy ducks) are relatively easy to shoot as they tend not to leave water-bodies during control activities.

Lifecycle Stages
Oxyura jamaicensis (ruddy ducks) produce large eggs to maximise survival of large nidifugous young. They breed first when one year old. They arrive on breeding grounds in April, nest building occurs mainly in May, incubation in June, and most broods hatch in July. Birds leave breeding areas in August/September. In the USA, age composition in autumn is estimated at 1:1 adults to juveniles. The sex ratio is male biased (c1.1-1-2 males per female in late winter). Survival rates are unknown. Maximum lifespan of wild ringed individuals in the USA is 13 years, but most were reported dead less than 2 years after ringing (US Dept. Interior unpubl. data); 18 captive birds had mean lifespan of 2.4 years.

Habitat Description
Oxyura jamaicensis (ruddy duck's) habitat includes marshes, lakes and coastal areas; and when not breeding, on sheltered brackish and marine coastal areas as well as lakes and rivers (temperate Zone). They nest on freshwater marshes, sloughs, lakes, and ponds, and in areas where open water is bordered by dense aquatic vegetation. The nest is a floating structure of marsh plants hidden by growing plants. Ruddy ducks lay eggs in nests of other waterfowl species. They may nest at potholes of less than an acre (InfoNatura, 2004).

Reproduction
Sexual. Seasonal - from April to August. Timing of breeding is controlled by physiological readiness modified by food availability, stability of water levels and available nesting cover. Egg-laying season is aligned symmetrically either side of longest day. Ruddy ducks may dump eggs and forego breeding if conditions become unsuitable. Breeding strategy is a mixture of monogamy, polygyny and promiscuity. Ruddy ducks can relay up to 4 times per season if eggs are lost. There is usually only one brood per year, but there can be a double brood (2-3 young per female per year).

Nutrition
Oxyura jamaicensis (ruddy ducks) feed on benthic invertebrates, especially chironomid larvae.

General Impacts
Oxyura jamaicensis (ruddy duck) threatens the globally endangered white-headed duck (see *Oxyura leucocephala* in IUCN Red List of Threatened Species) with extinction through introgressive hybridisation and competition.

Management Info
In the UK, a four year research programme (1992-1996) evaluated the success of seven control techniques (winter rifle-shooting, winter shotgun-shooting, summer rifle-shooting, summer shotgun-shooting (all shooting land based), winter trapping using baited cage traps, nest trapping females, and egg-control). Population modelling suggested that shooting, and breeding season shooting in particular, was the most efficient technique for ruddy duck control. Summer shooting was at least 2.5 times as efficient as nest-trapping, and at least 3.5 times as efficient as egg destruction (Hughes 1996). A regional trial of control methods (1999-2002), which has controlled over 2,000 ruddy ducks, has shown that shotgun-shooting from boats, thoughout the year, to be even more cost effective. \r\n
National control programmes for ruddy ducks and hybrids are now in place in Spain (84 ruddy ducks and 57 hybrids shot to December 2000), France (43 ruddy ducks shot to October 2000) and Portugal (one ruddy duck and two hybrids shot), but not in other key countries, such as The Netherlands, Belgium, and Morocco. In France and Spain where there are much smaller numbers of birds present, often only single birds in flocks of other ducks, a more selective shooting technique needs to be used, involving the use of rifles, hides (both floating and shore-based) and boats to move birds towards marksmen.\r\n
Please follow this link to view *BirdLife: White-headed Duck (Oxyura leucocephala)* for information on the population status of the white-headed and ruddy duck in Europe, legal protection, establishment of protected areas and planning conservation activities and the implementation of the recommendations of the Bern convention (Convention on the Conservation of European Wildlife and Natural Habitats).
Please follow this link to read Hughes, B., Robinson, J.A., Green, A.J., Li, Z.W.D. & Mundkur, T. (Compilers). 2006. International\r\nSingle Species Action Plan for the Conservation of the White-headed Duck *Oxyura leucocephala*.

Pathway
Accidental releases from waterfowl collections.

Principal source:

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ALIEN RANGE

[1] ALGERIA
[1] BELGIUM
[1] EUROPE
[1] FRANCE
[1] HUNGARY
[1] IRELAND
[1] ITALY
[1] NETHERLANDS
[1] PORTUGAL
[2] SPAIN
[1] SWITZERLAND
[1] TURKEY
[1] AUSTRIA
[1] DENMARK
[1] FINLAND
[1] GERMANY
[1] ICELAND
[1] ISRAEL
[1] MOROCCO
[1] NORWAY
[1] SLOVENIA
[1] SWEDEN
[1] TUNISIA
[1] UNITED KINGDOM

Red List assessed species 1: EN = 1;

Oxyura leucocephala **EN**

BIBLIOGRAPHY

16 references found for **Oxyura jamaicensis**

Managment information
BirdLife International 2002. White-headed Duck (*Oxyura leucocephala*).
Summary: This report gives details on the status of the white-headed duck and the ruddy-duck throughout Europe.
Available from: http://www.birdlife.info/saps/sapDetails.asp?sid=359 [Accessed 5 February 2008]
Department of the Environment, Transport and the Regions. 1999. White-headed Duck Task Force: Recommendations for action within the UK to conserve the globally threatened White-headed duck.
Summary: Available from: https://secure.fera.defra.gov.uk/nonnativespecies/index.cfm?pageid=245 [Accessed 12 March 2010]
Green, A.J. and Hughes, B. 2001. In: Parkin, D.B. (Ed.). BWP Update: The journal of birds of the Western Palearctic. In press. Oxford University Press, Oxford.
Summary: Detailed account of Ruddy Duck ecology, biology and behaviour, incldiuing sections on distribution, population status and conservation, movements, habitat, food, predators, disease, general behavious, antagonistic behaviour, courtship, copulation and breeding. Contact Baz.Hughes@wwt.org.uk for a copy.
Green, A.J. and Hughes, B.J. 1996. Action plan for the white-headed duck *Oxyura leucocephala*. In: Heredia, B., L. Rose and M. Painter (Eds.). Globally threatened birds in Europe. Council of Europe Publishing, Strasbourg. 119-146.
Summary: The White-headed Duck *Oxyura leucocephala* has undergone a considerable decline in range and population size this century, with the destruction and degradation of habitat and hunting being the causes.
Hughes, B. 1992. The ecology and behaviour of the Ruddy Duck (*Oxyura jamaicensis jamaicensis* (Gmelin)) in Great Britain. PhD Thesis, University of Bristol. 212 pp.
Summary: This project aimed to determine what interactions occur between introduced Ruddy Ducks and native British species of bird through a detailed study of their behaviour throughout the year. Contact Baz.Hughes@wwt.org.uk for a copy
Hughes, B. 1996. The feasibility of control measures for North American Ruddy Ducks (*Oxyura jamaicensis*) in the United Kingdom. Department of the Environement, UK. 153 pp.
Summary: Seven control techniques for Ruddy Ducks were evaluated between 1992 and 1996 - winter rifle-shooting, winter shotgun-shooting, winter trapping using baited cage traps, summer rifle-shooting, summer shotgun-shooting, nest trapping females, and egg-control.
Hughes, B. 1998. Ruddy Duck. In: Ogilvie, M.A. (Ed.). BWP Update: The journal of birds of the Western Palearctic. 2 (3): 159-171. Oxford University Press, Oxford.
Summary: Detailed account of Ruddy Duck ecology, biology and behaviour, incldiuing sections on distribution, population status and conservation, movements, habitat, food, predators, disease, general behavious, antagonistic behaviour, courtship, copulation and breeding. Contact Baz.Hughes@wwt.org.uk for a copy.
Hughes, B., Criado, J., Delany, S., Gallo-Orsi, U., Green, A.J., Grussu, M., Perennou, C., and Torres, J.A. 1999. The status of the North American Ruddy Duck *Oxyura jamaicensis* in the Western Palearctic: towards an action plan for eradication. Council of Europe Publication T-PVS/Birds (99) 9. Council of Europe Publishing, Strasbourg.
Summary: The North American Ruddy Duck *Oxyura jamaicensis* was introduced into the UK in the 1940 s. After escaping from captivity, Ruddy Ducks first bred in the wild in 1960 and increased to about 4,000 birds in 1998. Contact Baz.Hughes@wwt.org.uk for a copy.

Hughes, B., Robinson, J.A., Green, A.J., Li, Z.W.D. & Mundkur, T. (Compilers). 2006. International Single Species Action Plan for the Conservation of the White-headed Duck Oxyura leucocephala. CMS Technical Series No. 13 & AEWA Technical Series No.8. Bonn, Germany.
Summary: Global Action Plan for the White-headed Duck 30 March 2005.
Available from: http://www.unep-aewa.org/publications/technical_series/ts8_ssap_white-headed-duck_complete.pdf [Accessed 5 February 2008]
IUCN, SEO/Birdlife, and Haut Commissariat aux Eaux et Forets et a la lutte contre la desertification du Maroc. 2004. Plan d'action pour le controle de l erismature rousse au Maroc. (Action plan for ruddy ducks in Morocco) 2003-2005.
Summary: Action plan for the ruddy duck in Morocco. In French.
Johnsgard, P.A. and Carbonell, M. 1996. Ruddy ducks and other stifftails, their biology and behaviour. University of Oklahoma Press, London. 291 pp.
Summary: Detailed account of the ecology, biology and behaviour of all ten taxa of stiff-tailed ducks.
Smith, G. C., Henderson, I. S. and Robertson, P. A., 2005. A model of ruddy duck *Oxyura jamaicensis* eradication for the UK. Journal of Applied Ecology 2005 42, 546–555

General information

BirdLife International 2006. *Marmaronetta angustirostris*. In: IUCN 2007. 2007 IUCN Red List of Threatened Species
Summary: Available from: http://www.iucnredlist.org/apps/redlist/details/141535/0 [Accessed 12 March 2010]
BirdLife International 2006. *Oxyura leucocephala*. In: IUCN 2004. 2004 IUCN Red List of Threatened Species.
Summary: Available from: http://www.iucnredlist.org/apps/redlist/details/141428/0 [Accessed 12 March 2010]
InfoNatura: Birds, mammals, and amphibians of Latin America [web application]. 2004. Version 3.2 . Arlington, Virginia (USA): NatureServe.
Summary: Available from: http://www.natureserve.org/infonatura. [Accessed: October 23, 2004]
ITIS (Integrated Taxonomic Information System), 2005. Online Database *Oxyura jamaicensis*
Summary: An online database that provides taxonomic information, common names, synonyms and geographical jurisdiction of a species. In addition links are provided to retrieve biological records and collection information from the Global Biodiversity Information Facility (GBIF) Data Portal and bioscience articles from BioOne journals.
Available from: http://itis.gbif.net/pls/itisca/next?v_tsn=175175&taxa=&p_king=every&p_string=containing&p_ifx=plglt&p_lang= [Accessed March 2005]