

CONSERVATION

Rescuing European spoonbill eggs from spring tides

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In spring, strong tides destroy European spoonbill (*Platalea I. leucorodia*) nests at a well-known spoonbill breeding location in Paraje Natural de las Marismas del Odiel in southwestern Spain. One of the objectives of the local environmental authority in Andalucía (Consejería de Medio Ambiente, Junta de Andalucía) is to rescue these spoonbill eggs before they are destroyed. This initiative is part of a management plan for this species, which focuses on increasing the survival chance of spoonbill chicks to improve the knowledge about the species and to contribute to settlement of a new colony at a different site.

In 2006 approximately 450 eggs in 300 spoonbill nests were in danger of being destroyed by the spring tides. Consequently, 112 eggs were collected (67 in February and 45 in March), which were transported to Jerez Zoo, approximately 50 km east of the breeding site. The eggs were incubated and the chicks were hand-reared at the zoo for release back into the wild, using a common hacking technique. The release occurred at a different site located north of the Doñana area that is believed to be safer from flooding than the colony where the chicks originated from. A similar action was undertaken in 1997 (please refer to EAZA News 19/1997, p.9).

Incubation and rearing

A HF25 Masalles incubator with automatic regulation of humidity and temperature was used. Humidity was kept high (ca. 55%) and the temperature was kept around 37.4°C, resembling natural conditions. A total of 41 eggs hatched; 25 of 67 collected in February and 16 of 45 collected in March 2007.

The chicks were kept in artificial nests in groups of about five individuals. They were initially fed five times a day with a mixture of small-sized fish (*Fundulus* sp.) and shrimps (similar to their natural diet), ground beef heart, flamingo pellets (breeder fine ground, Mazuri®) and calcium. The number of feedings was reduced and the proportion of large fishes was increased after four weeks. The human foster parents wore a white t-shirt and a spoonbill adult-like helmet when feeding the chicks to reduce likelihood of the chicks imprinting on humans.

After another week, the birds were transferred to a large enclosure where they could fly. The weather conditions usually allowed the chicks to sun bathe for at least two hours a day. Body mass of the spoonbills was measured daily and bill and tarsus length were measured every four days.

Releasing the birds

A total of 38 chicks was raised successfully. Prior to releasing the birds, they were checked on common diseases including Avian Influenza. Five chicks were kept at Jerez Zoo after veterinary inspection. The other 33 chicks were released in May from an open enclosure in their natural habitat, with food supplied every day during one month. The birds could return to the enclosure freely, but soon progressively dispersed to other places.

PHOTOS JEREZ ZOO



It is expected that the spoonbills released last year will behave naturally. The spoonbills released in 1997 (72 chicks hatched and were successfully raised from 153 eggs) received the same treatment and showed natural behaviours. Some of the spoonbills released in 1997 have been recorded over-wintering in west Africa and/or breeding at different colonies distributed in southern Spain (unpublished data). If some of the birds return to the releasing site (due to a high philopatry) this will increase the probability that the species will initiate a colony at the selected site. Jerez Zoo will wait for the best results to come. •

