Captive Husbandry and Socialization of the Red-Billed Chough (Pyrrhocorax pyrrhocorax)

MALCOLM D. BURGESS¹,

DAVID WOOLCOCK²,

RAY B. HALES², REBECCA WAITE²,

ALISON J. HALES²

Zoo Biology Volume 31, Issue 6, pages 725–735, November/December 2012

Article first published online: 2 JUL 2012 DOI: 10.1002/zoo.21031 © 2012 Wiley Periodicals, Inc.

http://onlinelibrary.wiley.com/doi/10.1002/zoo.2012.31.issue-6/issuetoc

¹ Centre for Research in Animal Behaviour, College of Life & Environmental Sciences, University of Exeter, Exeter, United Kingdom
² Paradise Park Wildlife Sanctuary, Hayle, Cornwall, United Kingdom

*Correspondence to: Malcolm D. Burgess, Centre for Research in Animal Behaviour, College of Life & Environmental Sciences, Washington Singer Labs, University of Exeter, Exeter, Devon, EX4 4QG, United Kingdom. E-mail: m.d.burgess@exeter.ac.uk

ABSTRACT

Since the 1970s, Paradise Park Wildlife Sanctuary in Cornwall, United Kingdom, has built up a captive flock of red-billed choughs *Pyrrhocorax pyrrhocorax* and over 30 years has developed successful methods of keeping, breeding, and appropriately socializing them in captivity.

A total of 77 nests reached the egg stage with 27 nests producing at least one young and 48 young fledging in total. Several components are important in achieving successful breeding and socialization. Provision of live food, especially ant's eggs and small mealworms and crickets, in the first days after hatching is essential, improving the condition of adults and survival of nestlings. Situating aviaries in quiet areas, away from public view, is important. Socialization in family groups during the winter months and allowing choughs to choose partners induces better compatibility.

Introduction of nest cameras greatly improved young survival through early identification of health problems enabling treatment of young between hatching and 10-days old, when mortality is otherwise highest, and enabling precautionary medication shortly after hatching. We show that clutch size increases significantly with female age and that direct intervention such as artificial egg incubation and hand rearing can be successful and worthwhile, but its requirement is reduced by closer monitoring.

Red-billed choughs provide a good model species to further develop captive management and release techniques that can then be applied to critically endangered species that show similar social and long-learning behaviors. Captive breeding programs can play an important role in such work through provision of suitable birds and supporting avicultural expertise.

Zoo Biol. 31:725-735, 2012. © 2012 Wiley Periodicals, Inc.

Sponsors: Paradise Park through Operation Chough

and Conservation Works.