

The hand-rearing of an abandoned Bermuda petrel *Pterodroma cahow* chick from Nonsuch Island, Bermuda

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SUMMARY

An abandoned Bermuda petrel *Pterodroma cahow* (a critically endangered seabird) chick, about two thirds grown, was successfully fledged and returned to the wild.

BACKGROUND

The Bermuda petrel *Pterodroma cahow*, locally known as the Cahow, was believed to have been extinct for 300 or so years, until 1951 when a small breeding colony of 18 pairs was found. The population has been slowly recovering, and in 2005, the total population, including non-breeding birds, was 250 birds.

On 4 July 1997, a decision was made by Bermuda's Department of Conservation Services, to remove an abandoned Cahow chick from Nonsuch Island and place it under a supplemental feeding regime. The chick had hatched between 20 and 23 March 1997 and feeding by the breeding pair was regular throughout March and April, after which there were large gaps between visits. The last recorded visit was on 21/22 June 1997. At the time of removal the chick was two-thirds fledged, weighing 146 g, and still covered in grey down.

ACTION

The Cahow chick was transported from its nesting islet the 100 m to Nonsuch Island, and then onto the Bermuda Aquarium, Museum and Zoo (BAMZ). Here it was placed in a large container approximately the size of a cahow burrow, which was lined with newspaper and sand. The lid was kept on to mimic the darkness of the burrow, but adequate ventilation was ensured.

Feeding regime: The chick was fed each evening for 20 days. Food consisted of blended squid and shrimp (proportions 2:1) mixed with 1/8 tablet of Sea Tab (a nutrient tablet given to

sea birds), and a small amount of hot water to simulate the temperature at which it naturally was fed. The blender was sterilised with boiling water to prevent bacterial infection. With the chick held securely and its head tilted back by the upper mandible, a sterilised syringe with a 5 cm (2 inch) length of tubing attached, was gently eased down the chick's throat to feed it. Food intake was 60-90 cc in volume.

Exercise regime: From 15 July, before feeding each night, the chick was taken outside to exercise, simulating its natural routine. This is important for strengthening wing muscles. After the third day the chick was flying for 1-2 few metres at a time, indicating it was close to fledging. The chick was taken to Nonsuch Island on 20 July. This location was chosen for three reasons. Firstly, Nonsuch Island is approximately 100 m from the chick's original nesting islet. Secondly, Nonsuch Island is far from human habitation and light pollution. Thirdly, the site offered direct access to the open ocean, giving the chick the best chance of finding its way out to sea.

Release: The chick was kept inside its container in a house during the day. At 22:00 h each evening, the bird was taken in its container to a site 10 m from the cliff edge. An entrance hole was cut into the container and the chick was allowed to emerge on its own, undisturbed.

CONSEQUENCES

Weight gain: In the first four days, the chick lost weight, dropping to 136 g. After 20 days of the feeding regime, the chick's weight had

increased to 168 g. This was a little below the only other recorded hand-reared Cahow chick, which fledged at 181 g (Wingate 1972).

Fledging: On 23 July, the chick regurgitated its previous meal (normal behaviour in order to reduce weight before flight) and fledged at 23:28 hours, flying out toward the open sea.

REFERENCES

Wingate D.B. (1972) First successful hand-rearing of an abandoned Bermuda petrel chick. *Ibis*, 114, 97-101.

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