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Bruce Dix

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## **A new record this century of a breeding colony in the North Island for the New Zealand fur seal *Arctocephalus forsteri***

**Bruce Dix\***

The New Zealand fur seal (*Arctocephalus forsteri*) barely escaped extinction in the 19th century. Breeding colonies were restricted to the southern coasts of the South Island and the sub-antarctic islands of New Zealand. Late in 1991, a new rookery was discovered at Cape Palliser on the southern coast of the North Island, the first North Island record this century. In 1992 reports were received of seals pupping at the Sugarloaf Islands near New Plymouth. These two new records of fur seals breeding in the North Island indicate that the species is recovering after exploitation and beginning to re-occupy some of its former breeding range.

Keywords: Fur seal, pupping, rookery, range extension, North Island, *Arctocephalus forsteri*

### **INTRODUCTION**

The New Zealand fur seal *Arctocephalus forsteri* (Lesson, 1828) was brought close to extinction by the activities of commercial sealers during the 19th century (Mattlin, 1987). Apart from occasional, short open seasons, and for scientific research, fur seals have not been legally harvested since they were brought under legal protection in 1875 (Street, 1964; Crawley and Wilson, 1976).

Before the mid-1970s, known breeding colonies or rookeries were limited to the sub-antarctic islands, the Fiordland and west coasts of the South Island, and some small islands in Foveaux Strait (Crawley and Wilson, 1976). More recently, new rookeries have been recognized on the eastern and northern coasts of the South Island, including Banks Peninsula, Kaikoura, and Nelson (Cawthorn *et al.*, 1985). North Island colonies have been regarded as winter haulouts of transitory, non-breeding, migratory males that had moved northwards after the breeding season (Cawthorn *et al.*, 1985).

### **METHODS**

The main fur seal colonies in the Cook Strait region have been monitored since May 1991 by the Wellington Conservancy, Department of Conservation [DOC]. Each colony is visited approximately monthly. At each visit, the total number of animals is counted, any juveniles and females present are noted, and a collection made of scats and regurgitations for analysis of diet.

Females are distinguished from males by their smaller size and lighter build, particularly around the head and neck. Pups [year class 0+] are identified on the basis of size (Fig. 1), and by the colour of their pelage, which within a few weeks of birth moults from black to silvery-grey. Yearlings [year class 1+] are similar in colour to adults, but still smaller. Fuller descriptions are given by Crawley (1990). All immature animals, aged or not, are included within the general term "juveniles".

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\* Department of Conservation, P.O.Box 5086, Wellington.



Fig. 1 – Cows and pups on the offshore rock stack, photographed during a visit by boat on 29 January, 1992. The cleft in which the pups were first observed from shore is to the right of the picture.

The colonies visited regularly are at Cape Terawhiti, Tongue Point, Sinclair Head, Turakirae Head, and Cape Palliser (see Fig. 2). Smaller colonies are visited less frequently.

## RESULTS AND DISCUSSION

Juvenile fur seals have been reported at Cape Palliser for up to five years (Q. Hansen, DOC Te Kōpi, pers. comm. 1991), but on 19 May 1991, two small pups were observed amongst broken, tumbled volcanic rocks at the tip of Cape Palliser. They were estimated to be approximately six months old, based on the age/length ratios given by Crawley and Brown (1971), Crawley (1975), and Mattlin (1981), and by their silvery pelage. Although this habitat of tumbled boulders and offshore rock stacks has sufficient complexity and heterogeneity to qualify as suitable breeding habitat (Crawley, 1990), it was not possible to prove that these pups had been born at Cape Palliser. Weaned pups and yearlings are now known to be vagrant and wide-ranging (H. Best, DOC, pers. comm. 1992), and general field observations during the winters of 1990 and 1991 had also indicated that juveniles and yearlings may cross Cook Strait during the winter non-breeding season. The pups which were observed at Cape Palliser could, therefore, have originated from a rookery in the Kaikoura region (Fig. 2).

The fur seal colony at Cape Palliser occupies the offshore rock stacks and the adjacent boulder beach and sandstone bench, which are especially favoured by large numbers of males (pers. obs.). The social structure and behaviour of seals at part of the colony during a visit on 17 December 1991 was consistent with that of a rookery (Crawley and Wilson, 1976; Crawley *et al.*, 1977), and differed from that generally observed at other times, described by Johnstone and Davis (1987). Two large bulls were observed on a large offshore rock stack in an alert posture, surrounded by approximately 20 smaller animals, presumably cows. In a nearby cleft, up to six small animals (< 500 mm standard length) were observed through binoculars, all with the characteristic black pelage of newborn pups. During a return visit on

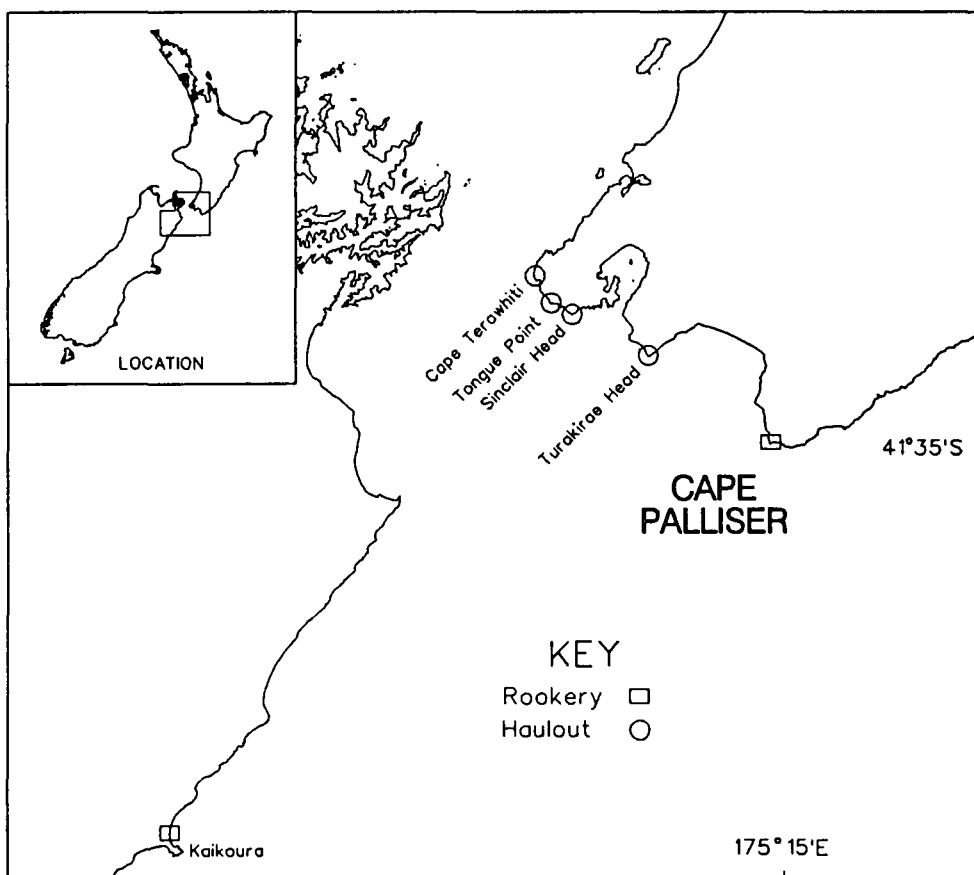


Fig. 2 – The Cook Strait region, showing locations of fur seal colonies on the North Island's southern coast.

9 January 1992, seven bulls, 20 cows, and 10 pups were counted on the rock stacks with the aid of a spotting scope. Another territorial bull, a cow, and three more pups were observed on the mainland at the tip of Cape Palliser.

This observation is the first confirmation of a rookery in the North Island this century. Of the five North Island sites utilized by fur seals in the Cook Strait region, pupping has been observed only at Cape Palliser.

The colony at Turakirae Head, west of Palliser Bay, may have been a former rookery. Bones of an adult fur seal and an unborn pup have been recovered from a silt layer in the raised beach system and dated at approximately 6,000 years BP (Homer and Moore, 1989). Homer and Moore cite this evidence as proof that fur seals lived and bred in this area at that time. Despite extensive habitat modification by a series of uplifts and subsequent quarrying, the population structure of the fur seal colony at Turakirae Head is very similar to that which was observed at Cape Palliser before the onset of pupping. At three locations within the colony where the usual breeding site selection criteria (Crawley, 1990) could possibly be met, small numbers of weaned pups, yearlings, juveniles and females can now be seen, where in previous years only mature males hauled out.

The remaining three colonies (Sinclair Head, Tongue Point, and Cape Terawhiti) are only winter haulouts, seasonally populated by mature males and deserted by early summer.

A report that fur seals have pupped at the Sugarloaf Islands off New Plymouth (B. Williams, DOC New Plymouth, pers. comm. 1992) has yet to be confirmed. If true, this second record would confirm that the population of fur seals is not only increasing, but re-occupying parts of its former range.

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#### REFERENCES

- Cawthorn, M.W., Crawley, M.C., Mattlin, R.H., and Wilson, G.J., 1985. Research on Pinnipeds in New Zealand. *Wildlife Research Research Review* 7. Wildlife Research Liason Group, Wellington.
- Crawley, M.C., 1975. Growth of New Zealand fur seal pups. *N.Z. Journal of Marine and Freshwater Research* 9: 539–45.
- Crawley, M.C., 1990. New Zealand fur seal. In C.M. King (Ed.): *The Handbook of New Zealand Mammals*, pp.246–256. Oxford University Press, Auckland.
- Crawley, M.C. and Brown, D.L., 1971. Measurements of tagged pups and a population estimate of New Zealand fur seals on Taumaka, Open Bay Islands, Westland. *N.Z. Journal of Marine and Freshwater Research* 5: 389–95.
- Crawley, M.C., Stark, J.D., and Dodgshun, P.S., 1977. Activity budgets of New Zealand fur seals *Arctocephalus forsteri* during the breeding season. *N.Z. Journal of Marine and Freshwater Research* 11: 777–88.
- Crawley, M.C. and Wilson, G.J., 1976. Natural history and behaviour of the New Zealand fur seal *Arctocephalus forsteri*. *Tuatara* 22: 1–29.
- Homer, L. and Moore, P., 1989. *Reading the Rocks; a Guide to the Wairarapa*. Landscape Publications Ltd., Wellington.
- Johnstone, R.M. and Davis, L.S., 1987. Activity in a non-breeding colony of New Zealand fur seals *Arctocephalus forsteri* [Note]. *N.Z. Journal of Marine and Freshwater Research* 21: 153–155.
- Mattlin, R.H., 1981. Pup growth of the New Zealand fur seal *Arctocephalus forsteri* on the Open Bay Islands, New Zealand. *Journal of Zoology, London* 193: 305–314.
- Mattlin, R.H., 1987: New Zealand fur seal *Arctocephalus forsteri*, within the New Zealand region. In Croxall, J.P., and R.L. Gentry [Eds.] 1987: Status, biology, and ecology of fur seals; Proceedings of an international symposium and workshop, Cambridge, England, 23–27 April 1984. NOAA Tech. Rep. NMFS 51.
- Street, R.J., 1964. Feeding Habits of the New Zealand fur seal *Arctocephalus forsteri*. *N.Z. Marine Department, Fisheries Technical Report* 9.