# PROPOSAL FOR INCLUSION OF SPECIES ON THE APPENDICES OF THE CONVENTION ON THE CONSERVATION OF MIGRATORY SPECIES OF WILD ANIMALS

A. PROPOSAL: Inclusion of Diomedea epomophora in Appendix II.

B. PROPONENT: Government of Australia

#### C. SUPPORTING STATEMENT

## 1. Taxonomy

1.1. Class

Aves

1.2. Order

Procellariiformes

1.3. Family

Diomedeidae

1.4. Genus/Species

Diomedea epomophora Lesson, 1825

Subspecies

epomophora Lesson, 1825, Southern Royal Albatross

sanfordi Murphy, 1917, Northern Royal Albatross

1.5. Common Name(s) Royal Albatross (English)

Albatros royal (French)

Albatros Real (Spanish)

# 2. Biological Data

# 2.1. <u>Distribution</u> (current and historical)

Diomedea epomophora is endemic to New Zealand. Recent breeding activity, has been recorded at six sites:

D. e. epomophora - Campbell Is., Adams I., Enderby I., Auckland I..

D. e. sanfordi - Taiaroa Head (South I.) and Chatham Is..

Marine and pelagic. The two subspecies are distinct and separable at sea, D. e. sandfordi. Sexes not distinguishable.

Disperses widely over Southern Ocean after breeding, with most birds probably moving east in a circumpolar movement. In the Pacific most birds occur between 30°S to 60°S, although some travel as far north as 20°S. Seen off both east and west coast of South America, but mainly off coast of Argentina. From there, they fly around the subantarctic zone, across the southern Indian Ocean and south of Australia to return to New Zealand (Robertson 1985). Overall, most commonly recorded in New Zealand and South American waters. Movement data are summarised in Marchant and Higgins (1990).

Juvenile *D. e. epomophora* disperse eastwards to the Argentinian shelf (SW Atlantic) where they may remain for several years before returning to New Zealand in eastward direction. There have been no banding recoveries of immature *D. e. sandfordi*. Recoveries of adults suggest long range dispersal in years between breeding with main wintering grounds possibly being in the African sector (*sandfordi*) and South Atlantic off Argentina (*epomophora*). Most sightings are over pelagic waters. In New Zealand waters, *epomophora* is most common on coastal shelves and Auckland and Snares shelves, and is more numerous than *sanfordi* in all areas except the Chatham Rise (J.A. Bartle pers. comm. in Gales 1993).

#### 2.2. Population

Breeding population estimated to be about 13 000 pairs each year, which equates to about 40 000 mature birds (Gales, in press).

The population at Enderby I. was eliminated in 1868 by humans. Recolonisation occurred at this site in the 1940s and the annual breeding population is currently about 40 pairs. In 1992 - 93 interbreeding between the two subspecies was recorded at this site. About 15 pairs breed every year at Adams I. in the Auckland Is. group (C.J.R. Robertson pers. comm. in Gales 1993). At Campbell I. a lack of reliable population census data and the effects of farming and human predation make evaluation of past and present status impossible. The population on Campbell I. was apparently declining in the 1920s due to habitat degradation by sheep and human predation associated with farming activities. Shepherds left the island in 1931 and sheep numbers declined over the next 30 years with an apparent recovery in the albatross population (Moore and Moffat 1990a). Counts between 1978 and 1988 range between 4200 - 4600 pairs per year and while it is possible that a stable population persists, this cannot be assumed as the census techniques differed between years (Moore and Moffat 1990a).

The small population at Taiaroa Head was first established about 1919 and has been the focus of close study since 1937 (Richdale 1939, 1952). These and other studies have provided detailed survival and recruitment data for birds at this location, summarised by Robertson (1991), and the annual breeding population is currently about 15 pairs (total of 25 pairs). The survival of this mainland population is facilitated by constant surveillance, predator control and human intervention (e.g. chick fostering). The majority of these birds are *D. e. sanfordi* but a small proportion are *epomophora* x *sanfordi* hybrids. Of the present population at Taiaroa Head most were hatched there but a few immature birds arrive from the Chatham I. population and return to breed in later years.

The Chatham Is. is decreasing and this trend is expexted to continue (Gales, in press). The most recent estimate of the population at the Chatham Is. is 5200 pairs in 1995 (C.J.R. Robertson pers. comm. in Gales, in press).

## 2.3. Habitat

Nests on slopes with tussock grass providing some shelter, but often at exposed sites.

## 2.4. Migratory patterns

See Distribution.

#### 3. Threat data

### 3.1. Direct threats to the population

Both subspecies are caught as bycatch by longline fishing vessels in the Australian Fishing Zone. The circumpolar dispersal allows for extensive overlap with longline operations. The nature and magnitude of these interactions remains to be quantified.

On the Chatham Is. extremely low levels of chick production were recorded from 1989 - 91. The

cause of the low production rates is unknown. Continued predation by humans on the Chatham Is. contributes to the decline in this population..

Flystrike has been recorded as a cause of chick mortality at Taiaroa Head (Gales 1993).

## 3.2. Habitat destruction

One cause of the current decline Chatham Is. population is thought to be nesting habitat degradation caused by severe storms.

On Campbell I. the sheep population is increasing causing overgrazing and erosion and reducing the nesting opportunities for albatross (Moore and Moffat 1990a). There is also considerable degradation following severe storms in the 1980s and subsequent drying out of habitat.

Rabbits on Enderby I. continue to degrade the habitat, although there are proposals for their eradication.

## 3.3 <u>Indirect threat</u>

Disturbance by tourists has had a demonstrated effect on the birds at Taiaroa Head, and this should be considered as ecotourism flourishes in the Southern Ocean, particularly with respect to the Enderby I. population.

## 3.4. Threat connected especially with migrations

Pelagic threats include fisheries bycatch discussed above.

## 3.5. National and International Utilisation

None known.

#### 4. Protection status and needs

#### 4.1. National protection status

Completely protected in Australia, including its Exclusive Economic Zone (to 200nm) and all external territories.

# 4.2. <u>International protection status</u>

None known.

# 4.3. Additional protection needs

The extent of predation by rats and cats should be investigated at Campbell Is. Eradication of sheep from the island has been recommended by Moore and Moffat (1990a) as the most cost effective method of halting problems they create. The effects of tourism should continue to be monitored at Taiaroa Head and also at other breeding locations where tourism occurs.

Research is required into the nature and extent of fisheries mortality in longline and other fisheries. Methods of mitigating this threat (e.g. tori (bird) poles, night setting, weighted branch lines, bait throwing devices) have been developed and should be appropriately assessed and implemented in each type of fishery operation. Assessment of mitigating methods should consider the effect on the catch of target species as measures will only be used on the high seas if they do not impact on the efficiency and economics of the fishery. The mitigating measures should not increase bycatch of other species. National and International cooperation and collaboration between fisheries managers, fishers, ornithologists and regulators should encouraged.

A greater coverage of specialist seabird scientific observers on boats fishing in the Exclusive Economic Zones of range states and on the high seas is needed to improve the quality and quantity of bycatch data. Currently, most observers are present on boats to mainly record target species catch data.

Where possible carcasses of birds killed should be retained for analysis of species, provenance, age and sex. Banded birds should be reported.

# 5. Known Range States

Argentina, Australia, Chile, New Zealand, Uruguay International Waters (Pacific, Atlantic, Southern Oceans)

## 6. Comments from Range States

#### 7. Additional remarks

This species is considered near threatened by Collar et al. (1994).

#### 8. References

See Reference at the very end of this document (pp. 182-187).