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

A. PROPOSAL: To list Bristle-thighed Curlew *Numenius tahitiensis* on Appendix I

B. PROPONENT: Government of Cook Islands

C. SUPPORTING STATEMENT:

1. Taxon

1.1	**Class**	**:**	Aves
1.2	**Order**	**:**	Charadriiformes
1.3	**Family**	**:**	Scolopacidae
1.4	**Species**	**:**	*Numenius tahitiensis*
1.5	**Common names**	**:**	Bristle-thighed Curlew; Courlis d'Alaska; Zarapitio del Pacífico

2. Biological data

2.1 Distribution

Numenius tahitiensis is a long distance (full?) migrant that breeds only in two relatively small montane areas of western Alaska, USA. Suggestions that it breeds in Russia are unsupported (R. E. Gill *in litt* 1999, 2003). Its breeding range is estimated at 45,300 km^2.

It winters only on remote Pacific Ocean islands and atolls (Marks *et al.* 1990) including Guam (USA), the Hawaiian Islands (USA), US Minor Outlying Islands, Northern Mariana Islands (to USA), Federated States of Micronesia, Marshall Islands, Nauru, Kiribati, Tuvalu, Tokelau (to New Zealand), Tonga, Niue (to New Zealand), Samoa, American Samoa, Cook Islands, Wallis and Futuna Islands (to France), French Polynesia, also reaching the Solomon Islands, Norfolk Island (to Australia), Kermadec Islands (New Zealand), Pitcairn Islands (to UK) (Notably Oeno and Henderson) and Easter Island (Chile) (Brooke 1995, Vilina *et al.* 1992, Y. Vilina *in litt*. 1999). Its wintering range is estimated at 57,000 km^2.

It has occurred on passage in Fiji, and as a vagrant in Indonesia, Japan, Papua New Guinea and the Philippines.

The geographic distribution of the species has contracted in recent years (Marks *et al.* 2002).

2.2 Population

About 60 per cent of the population nests in the Andreafsky Wilderness of the north Yukon River Delta and 40 per cent on the central Seward Peninsula, about 300 km north of the Yukon Delta (C. Handel unpublished data). The two populations are genetically distinct (S. Talbot *et al.* unpublished) and satellite tracking data indicates birds from the two populations migrate to different non-breeding areas (R. Gill unpublished).

This species has been listed by IUCN as Vulnerable since 1994 because its population is small and believed to be declining.

2.3 Habitat

It breeds in dwarf-shrub tundra at 100-350m elevation. Its non-breeding habitat includes ocean terraces, coral reefs, inter-islet channels, ocean and lagoon sand beaches, intertidal flats, saltpans, rocky shores and also in palm forests and dense vegetated understorey (Pratt *et al.* 1987, Gill & Redmond 1992).

During moult, flightless birds take shelter during the day in dense stands of bunchgrass *Eragrostis variabilis* (Marks *et al.* 1990) and on the autumn staging grounds gather in communal nocturnal roosts in shallow water ponds of up to approximately 120 individuals (Tibbitts 1990).

In the non-breeding season it forages primarily in terrestrial habitats consuming spiders, land crabs, insects, seabird eggs, lizards and carrion (Mark 1993).

2.4 Migrations

It breeds during May-July. Birds congregate in the Yukon-Kuskokwin Delta in August, and migrate south, mostly bypassing the northwestern Hawaiian Islands to make landfall after flights of 6,000 km or more. It is long-lived (15-23 years), and is highly faithful to breeding and wintering sites (Marks & Redmond 1994, 1996).

Sub-adults may remain in the Pacific until they are nearly three years old (Marks *et al.* 1992).

3. Threat data

The population is thought to be declining largely as a result of predation by introduced mammalian predators on the wintering grounds, when perhaps more than 50 per cent of adults are flightless during autumn moult.

3.1 Direct threats

Introduced rats, cats, dogs and possibly pigs heavily depredate flightless birds on wintering grounds due to the fact that this species has a rapid prebasic moult during which about 50 per cent of the adults become flightless for approximately 92 days between August and December (Marks 1993). The population size is this especially vulnerable to disturbance and mortality on the wintering grounds.

Breeding birds are depredated by several species of raptor and falcons, while eggs and young are taken by Parasitic Jaeger *Stercorarius parasiticus*, Common Raven *Corvus corax* and foxes.

Ingestion of lead paint on Midway Island needs to be investigated as a potential threat to the species (it was recently identified as a problem in sea birds) (R.E. Gill *in litt.* 1999, 2003).

3.2 Habitat destruction

Habitat loss and degradation on the wintering grounds is a problem.

Gold mining is a potential future localized threat in Alaska (R. E. Gill *in litt.* 1999, 2003).

3.3 Indirect threats

Bristle-thighed curlews have died from inadvertent poisoning – both through directly consuming bait and through secondary after hermit crabs that have consumed bait – as part of eradication programmes of non-native predators on Pacific islands (Gill 2010).

3.4 Threats connected especially with migrations

3.5 National and international utilization

Hunting for food is localized, particularly in the Tuamotus, and recent reports suggest it may also be a threat in the Marshall Islands, Carolines, US Minor Outlying Islands and Hawaiian offshore islands (G. Allport *in litt.* 2006).

4. Protection status and needs

4.1 National protection status

It is listed as of high conservation concern in the US Pacific Islands Regional Shorebird Conservation Plan (Engilis & Naughton 2004) and the US Shorebird Conservation Plan (Brown *et al.* 2001).

Most breeding and staging grounds are well protected. The Hawaiian Islands National Wildlife Refuge protects several wintering and stop-over sites. Protection and management of habitat at Kahuku, on O'ahu, has facilitated an increase in the local wintering population (P. Donaldson *in litt*. 1999).

4.2 International protection status

CMS Appendix II.

4.3 Additional protection needs

- Survey key historical sites.
- Monitor population trends.
- Assess harvesting threat.
- Identify sites with high concentrations of wintering birds.
- Identify migratory stop-over sites.
- Protect and manage key islands, atolls and other wintering sites.
- Increase public awareness especially in its winter range.

Measures need to be taken to avoid inadvertent poisoning during alien mammalian predator eradication programmes in non-breeding areas, including of sub-adult birds that may be

present throughout t he year, and including by secondary poisoning through consumption of scavengers of poisoned baits including crabs, insects, lizards and rats (Pierce *et al.* 2008, Gill 2010).

Countries where this species has triggered the criteria for Important Bird areas as identified by BirdLife International include French Polynesia (six sites), Pitcairn (UK) (two sites) and the USA (five sites including three in Alaska (two breeding sites and one stop-over) and two in Hawaii iba.audubon.org) (BirdLife International 2011). These sites particularly merit legal protection.

5. Range States[1]

CHILE, COOK ISLANDS, Fiji, FRANCE (French Polynesia, Wallis and Futuna Islands), Indonesia, Japan, Kiribati, Marshall Islands, Federated States of Micronesia, Nauru, NEW ZEALAND (including Tokelau), Niue, Papua New Guinea, PHILIPPINES, SAMOA, Solomon Islands, Tonga, Tuvalu, United States (including American Samoa, Guam, Northern Mariana Islands, United States Minor Outlying Islands).

6. Comments from Range States

7. Additional remarks

8. References:

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Brown, S., Hickey C., Harrington B. And Gill R, eds (2001) The U.S. Shorebirds Conservation Plan, 2nd ed. Manomet Center for Conservation Sciences, Manomet, MA.

Engilis, A. & Naughton, M (2004) U.S> Pacific Islands Regional Shorebird Conservation Plan. U.S. Fish and Wildlife Service. 18pp. Online at http://www.fws.gov/shorebirdplan/RegionalShorebird/downloads/USPI1.pdf.

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Gill, C. (2010) *Summary of Risks & Potential Mitigation Options for Bristle-thighed Curlews* (Numenius tahitiensis) *at Palmyra Atoll during a Rat Eradication Campaign*. Prepared for: Palmyra Atoll Rainforest Restoration Project.

Marks, J.S. (1993) Molt of Bristle-thighed Curlews in the Northwestern Hawaiian Islands. *Auk* 110: 573-587.

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[1] CMS Parties are shown in capital letters.

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Pierce, R., Anterea, N., Anterea, U., Broome, K., Brown, D., Cooper, L., Edmonds, H., Muckle, F., Nagle, B., Oakes, G., Thorsen, M. & Wragg, G. (2008) Operational work undertaken to eradicate rats and rabbits in the Phoenix islands, Republic of Kiribati, May-June 2008. 73pp.

Pratt, H.D., Bruner, P.L. & Berrett, D.G. (1987) *A Field Guide to the Birds of Hawaii and the Tropical Pacific*. Princeton University Press, Princeton, New Jersey. 409pp + 45 plates.

Tibbitts, L. (!990) Phenology and habitat use during ground surveys of the Yukon-Kuskokwim River Delta. Pages 11-13 in *Summary of the proceedings from the Bristle-thighed Curlew Workshop* (R.E. Gill, Jr & C.M. Handel, compilers). U.S. Fish and Wildlife Service, Anchorage, AK.

Vilina, Y. A., Larrea, A. & Gibbons, J.E. (1992) First record of the Bristle-thighed Curlew *Numenius tahitiensis* in Easter Island, Chile. *Wader Study Group Bull*. 66:43-44.