

Summary of research on Pink-footed shearwaters (*Puffinus creatopus*), Juan Fernández petrels (*Pterodroma externa*), Stejneger's petrels (*Pterodroma longirostris*), and Kermadec petrels (*Pterodroma neglecta*)

*the following abbreviations will be used below:

PFSH = *Puffinus creatopus*

JFPE = *Pterodroma externa*

STJE = *Pterodroma longirostris*

KEPE = *Pterodroma neglecta*

*data presented below are for the following locations in 2003 unless otherwise stated:

PFSH, Isla Santa Clara

JFPE, Isla Alejandro Selkirk

STPE, Isla Alejandro Selkirk

KEPE, Morro Juanango

*data are means \pm 1SD

Population estimates:

PFSH: 43.3% (\pm 14.7) estimated burrow occupancy

2,544 active burrows, or breeding pairs on Santa Clara (of total 5,876 burrows estimated on Santa Clara)

6,064 burrows estimated on Robinson Crusoe in large colonies at Vaquería, Puerto Francés, and Piedra Agujereada (not intended as an island estimate)

JFPE, STPE: 0.52 burrows/m² nest densities in study plots at Tres Torres, all JFPE nests

0.99 burrows/m² nest densities in plots at Cordon Inocentes Bajos, all JFPE nests

75% (\pm 8.5) estimated burrow occupancy of JFPE burrows within plots

84% estimated burrow occupancy of STPE burrows within plots

KEPE: 64% estimated nest occupancy

Breeding biology:

	PFSH	JFPE	STPE	KEPE
Chick hatching rate	78%	83%	89%	75%
Chick survival rate through mid March	88%	76%	88%	71%
Overall breeding success rate to mid March	69%	63%	78%	54%

Foraging ecology:

PFSH: (data collected via satellite transmitters)

2003: 2-10 day minimum foraging trip length, with maximum duration as long as 18 days

479km (\pm 147SD) mean linear distance of foraging trips from Isla Santa Clara

2002: 2-4 day minimum foraging trip length, with maximum duration of 4 days

175km (\pm 78SD) mean linear distance of foraging trips from Isla Santa Clara

Competition and Predation:

PFSH: 18% (\pm 6) burrows on Santa Clara had eggs ejected

2% (\pm 2) burrows on Robinson Crusoe had eggs ejected

0 dead adults, 0 dead chicks found on Santa Clara within predation plots

36 dead adults, 92 dead chicks found on Robinson Crusoe within predation plots

0% breeding adults failed potentially due to predation on Santa Clara

12% (\pm 9) breeding adults failed potentially due to predation on Robinson Crusoe

JFPE, STPE: 37 ejected eggs from JFPE nests found in predation surveys

20 JFPE dead adults, 2 JFPE dead chicks found in predation surveys (85%, 100% showing evidence of cat predation, respectively)

9 STPE dead adults, 0 STPE dead chicks found in predation surveys (100% showing evidence of cat predation)

2-3% breeding adults failed potentially due to predation

Measurements of Focal Species:

	Adult mass (g)	Egg measurements	
		Length (mm)	Width (mm)
Pink-footed shearwater	765 (\pm 67)	72.7 (\pm 3.0)	48.3 (\pm 0.6)
Juan Fernández petrel	496 (\pm 49)	67.4 (\pm 2.7)	47.8 (\pm 1.4)
Stenejener's petrel	161 (\pm 15)	51.1 (\pm 0.9)	37.1 (\pm 1.4)
Kermadec petrel	(no data)	63.9 (\pm 1.0)	46.8 (\pm 1.0)