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PARENTAL PROVISIONING PATTERNS OF WEDGE-TAILED SHEARWATERS AND THEIR RELATION TO CHICK BODY CONDITION CHERYL L. BADUINI¹

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Abstract. I studied the provisioning patterns of a subtropical, northern-hemisphere procellariiform, the Wedge-tailed Shearwater (*Puffinus pacificus*) and measured the responses of parents to chick body condition. Foraging trip length, meal size, delivery rate, and chick body condition were measured during nesting periods in 1996 and 1997. Wedge-tailed Shearwaters adopted a unimodal foraging strategy with foraging trips that averaged 1.5 to 2 days duration and averaged about 40–50 g of food per trip. The rate of food delivery (g of food per day spent foraging) decreased with increasing trip duration, such that one-day trips resulted in the greatest rate of food delivery to the nest in both 1996 and 1997. Chicks left in poorer body condition were more likely to receive visits from one or both adults the following evening (1996 and 1997) and received larger meals (1996) than those left in better condition. Although foraging strategies may differ from subpolar and temperate shearwater species, rates of food delivery to chicks (40–60 g per day) for Wedge-tailed Shearwaters were similar to these species, which feed in highly productive areas and employ bimodal (short and long) foraging trips. The distribution and abundance of prey resources in the foraging environment of procellariiform seabirds may influence foraging strategies of parents, the timing and amount they feed offspring, and the duration of parental care.

Key words: adult body condition, chick body condition, meal size, provisioning, *Puffinus pacificus*, trip duration, Wedge-tailed Shearwater.