

FEATURE ARTICLES

INTERCOLONY AND ANNUAL DIFFERENCES IN THE DIET AND FEEDING ECOLOGY OF LITTLE TERN ADULTS AND CHICKS IN PORTUGAL

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Abstract. We used pellets and prey dropped near nests to study the diet and feeding ecology of Little Tern (*Sterna albifrons*) adults and chicks in northern and southern Portugal during 2000–2004. We compared diets among study areas, years, and birds breeding in two main habitat types: sandy beaches and salinas (man-made salt-pans). We also sampled prey fish in one study area and used published data from another area to examine whether the diet of Little Tern adults and chicks corresponded with the abundance of prey found in primary foraging habitats. Adult Little Terns fed mainly on sand-smelts (*Atherina* spp.) and gobies (*Pomatoschistus* spp.), which were the most abundant fish species in our estuarine and lagoon study areas. Despite some differences among colonies we did not find clear differences in adult diets among study areas and habitat types. Little Tern chicks also ate primarily *Atherina* spp., but their diet was more diverse than that of the adults, and characterized by a significantly higher proportion of prey with a high energetic value such as sardines (*Sardina pilchardus*), garfish (*Belone belone*), and killifish (*Fundulus* spp.). Chick diets differed significantly between habitat types, which may be a consequence of the limited foraging range of adult breeding birds. Both adult and chick diets matched the abundance of the main prey in our study areas, confirming the opportunistic foraging character of this species. We suggest that annual variation in prey availability may be the most important factor explaining annual variation in adult diets.

Key words: diet, estuarine terns, foraging ecology, foraging habitats, Little Tern, *Sterna albifrons*.