

## **IMPROVEMENT OF CHICK PROVISIONING WITH PARENTAL EXPERIENCE IN A SEABIRD**

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Age-related differences in the reproductive success of birds may be the result of experience-dependent changes in foraging and further parental skills. We tested this hypothesis in a long-lived seabird – the common tern *Sterna hirundo*. Transponder-marked birds were observed while feeding their young (1) as first-time-breeders (recruits) and (2) as experienced breeders in two consecutive years in a breeding colony at Port Wilhelmshaven, Lower Saxony, Germany. The influence of individual breeding experience on feeding rate, feeding success and food composition was investigated under consideration of potential year effects, using multivariate statistics. In addition, we compared the breeding success of experienced and inexperienced breeders. Feeding rate was not linked with experience, whereas experienced breeders had a higher feeding success than recruits. Both experienced breeders and recruits fed their young with the same prey species, but in recruits, the proportion of prey items with low energy content was higher. The latter was linked with a lower breeding success of recruits. Our study is, to our knowledge, the first one documenting an individual improvement of skills as reason for age-dependent improvement of reproductive success in birds after recruitment.

Keywords: Age differences; Chick growth; Diet spectrum; Experience; Feeding behaviour; Feeding efficiency; Recruits; *Sterna hirundo*.