

琉球大学学術リポジトリ

PELAGIC LARVAL DURATIONS AND LARVAL DISPERSAL OF AMPHIDROMOUS SLEEPER, ELEOTRIS

メタデータ	言語: 出版者: 琉球大学21世紀プログラム 公開日: 2007-07-10 キーワード (Ja): キーワード (En): 作成者: メールアドレス: 所属:
URL	http://hdl.handle.net/20.500.12000/827

**PS-33 PELAGIC LARVAL DURATIONS AND LARVAL DISPERSAL OF
AMPHIDROMOUS SLEEPER, *ELEOTRIS***

Ken Maeda, Nozomi Yamasaki, and Katsunori Tachihara

Three amphidromous species of *Eleotris* are known to inhabit streams on Okinawa Island, Japan. During our studies of their life histories, we took note of the recruitment of *E. acanthopoma* occurred throughout the year despite they might not spawn from January to April in Okinawan streams. Therefore, their pelagic larvae just before recruitment to the streams were collected in the beaches and the daily increments of their otoliths were counted to estimate the pelagic larval durations. As a result, the ages of *E. acanthopoma* larvae were determined from 63 to 134 days (n=110). They were considered to spend relatively long pelagic larval life and the durations were varied depending on the seasons. Birthdays of most larvae collected from May to July dated during their non-spawning season in Okinawan streams. Thus, it was suggested that considerably portions of their recruited larvae were born in some other islands and came from across the ocean at least for specimens collected from May to July. Other two species, *E. melanosoma* and *E. fusca* were also estimated to spend long pelagic larval durations (about three to four months) and their larvae were also considered to disperse widely. Their life histories are characterized by high fecundity, small eggs, and undeveloped phase of newly hatched larvae, in addition to long duration and wide dispersal of pelagic larvae, and such strategies may be advantageous to remain the descendants among tropical and subtropical small island regions where unstable small streams are sparsely distributed.