

Chapter 4

Silver Eel Migration and Behaviour

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4.1 Introduction

After their first transatlantic migration, larvae metamorphose into ‘glass eels’ and swim into estuarine areas of river deltas. The glass eels develop into the so-called elvers (~65 mm) which swim up the rivers. They enter inland waters of northern Africa and Europe during different periods; Morocco: September–October; Spain, Portugal, South France: November–December; North France: January–March; British Islands and the Netherlands: February–April and Scandinavia: April–May. After reaching a length of 30 cm, elvers become known as yellow eels. These specimens have moved inland to coastal seawater or inland freshwater and continue to grow for some 8–15 years (males) up to 10–18 years (females), but they even may become much older.

After their period of growth, in preparation of their return trip to the spawning grounds, the eels transform into silver eel. Once the eel has undergone pre-puberty or “silvering”, which is accompanied by marked changes in morphology, body constitution and other features (see Chapter 2), it is ready to start its spawning migration. Its lifestyle changes radically. As we have seen in Chapter 2, silver eels stop feeding, they have already acquired salinity tolerance while still living in freshwater and finally they have begun their puberty. As European eels, *Anguilla anguilla*, spawn in the Sargasso sea, the silver eels must migrate from inland or coastal waters over a distance of about 6,000 km to reach this area. Somehow silver eels are triggered by environmental factors to start their migration.

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