

Essential Fish Habitat Descriptions **Atlantic Wolffish (*Anarhichas lupus*)**

Eggs: Essential fish habitat for wolffish eggs is described as bottom habitats of the continental shelf and slope within the Gulf of Maine south to Cape Cod, and on Georges Bank between 40 and 240 meters. In the Gulf of Maine, spawning is thought to occur during September and October, and there is a 3-9 month incubation period prior to hatching; thus wolffish eggs are assumed to be present throughout most of the year. Wolffish eggs are deposited in rocky substrates and brooded in nests, which are guarded by males for some period but perhaps all the way until hatching. The temperature range for wolffish eggs is assumed to be the temperature range in which adult wolffish were captured in the NMFS trawl survey, 0 to 14.3° C. Salinity or dissolved oxygen preferences were not reported, however, wolffish are not known to occur in brackish or estuarine waters, and it is assumed that the offshore waters they inhabit are well-mixed/oxygenated.

Larvae: Essential fish habitat for wolffish larvae is described as the surface to the seafloor across the predominant depth and distribution range identified for the species, 40 to 240 meters within the Gulf of Maine south to Cape Cod, and on Georges Bank. Larvae remain close to the bottom and the hatching site, presumably using rocky substrates for shelter. Because wolffish appear to be largely sedentary and the larvae do not appear to have a long (if any) pelagic stage, the temperature range for larval wolffish is assumed to be the temperature range in which adult wolffish were captured in the NMFS trawl survey, 0 to 14.3° C. Salinity or dissolved oxygen preferences were not reported, however, wolffish are not known to occur in brackish or estuarine waters, and it is assumed that the offshore waters they inhabit are well-mixed/oxygenated.

Juveniles: Wolffish in the Gulf of Maine reach maturity at age 5-6 years, so fish younger than this age would be considered juveniles. Essential fish habitat for wolffish juveniles is described as bottom habitats of the continental shelf and slope within the Gulf of Maine south to Cape Cod, and on Georges Bank. Substrate preferences range from large stones and rocks, used for shelter and nesting, to softer substrates where feeding occurs. The depth range of Atlantic wolffish in this region ranges from 40 to 240 meters. The preferred temperature range for adult wolffish is assumed to be the temperature range within which they were caught in the NMFS trawl surveys, 0 to 14.3° C. Salinity or dissolved oxygen preferences were not reported, however, wolffish are not known to occur in brackish or estuarine waters, and it is assumed that the offshore waters they inhabit are well-mixed/oxygenated.

Adults: Essential fish habitat for wolffish adults is described as bottom habitats of the continental shelf and slope within the Gulf of Maine south to Cape Cod, and on Georges Bank. Substrate preferences range from large stones and rocks, used for shelter and nesting, to softer substrates where feeding occurs. The depth range of Atlantic wolffish in this region ranges from 40 to 240 meters. The preferred temperature range for adult wolffish is assumed to be the temperature range within which they were caught in the NMFS trawl surveys, between 0 and 14.3° C. Salinity or dissolved oxygen preferences were not reported, however, wolffish are not known to occur in brackish or estuarine waters, and it is assumed that the offshore waters they inhabit are well-mixed/oxygenated.