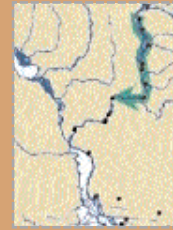


Hemibagrus filamentus
ex-Mystus nemurus
 (Valenciennes, 1839)

Order Siluriformes
 Family Bagridae
 Genus *Hemibagrus*
 Species *filamentus*



migration patterns



data stations



Migration patterns for important Mekong fish (41)

[back to species list](#)

Mystus nemurus was recently renamed *Hemibagrus filamentus*¹. *Hemibagrus filamentus* occurs throughout the Mekong mainstream, from the Mekong delta to Bokeo and Chiang Saen in the north. Many fishermen reported that the species is very common and can be found throughout the year.

There was consensus among the fishermen all along the Mekong that this species undertake shorter local migrations within the Mekong mainstream at the onset of the flood season. With the rise in the water level, the fish migrate into smaller tributaries and out into flooded areas. When water levels start to recede at the end of the flood season, the fish return to the main river channel where they remain during the dry season.

Five stations along the stretch from Kandal province to the Khone Falls reported upstream migrations occurring just before, and during, the full moon. At Loei, the species migrates during the waning-moon phase.

Spawning was observed to occur in flood-plain areas. Three fishermen reported directly observing spawning of *Hemibagrus filamentus* associated with flood-plain habitats. At Chiang Saen in the far north of the survey area, one fisherman observed spawning in a flooded swamp near Ban Saew village in July. In Klong Kaem district of Ubon Ratchatani province in Thailand, a fisherman observed spawning in the flooded fringe of a small stream, Huai Ton, during May-June. The flooded spawning area contained mainly trees and shrubs. Finally, in Cao Lanh district, in Dong Thap province of Viet Nam, a fisherman observed spawning in a flood-inundated wet rice-growing area.

Almost all stations provided several reports on observations of eggs in the fish. The reports were distributed as follows

1. Dr. Chavalit Vidthayanon, personal communication.

(number of reports in brackets): February (2 reports), March (4), April (17), May (30), June (26), July (15), August (4), September to December (1 per month). One fisherman from Paksan had observed big, red-brown eggs during June-July. Juveniles, 2 to 4 cm in size, were reported from all over the survey area, from Chiang Khong in the north to the Mekong delta.

Hemibagrus filamentus was previously recorded in fisheries around the Khone Falls (Baird, 1998). In a gill-net fishery at Ban Hang Khone, which mainly target small cyprinids such as *Scaphognathops* spp., *Hemibagrus filamentus* ranked as tenth in terms of total weight. In the dry season, tone trap fishery, which targets highly migratory cyprinids (e.g., *Henicorhynchus* spp. and *Paralabuca typus*), the species was ranked 35 in terms of total biomass. *Hemibagrus filamentus* were also caught during the flood season, where it ranked twelfth and eighteenth in *chan* trap and *kha* trap fisheries, respectively (Baird, 1998).

Singanouvong et al. (1996a) also reported *Hemibagrus filamentus* from gill-net catches at the Khone Falls, but did not consider it to be migrating over the Khone Falls during the dry season. However, during the monsoon season, the same authors listed the species as an upstream migratory species, based on catch records from the highly specialised *lee* (wing) trap fisheries right at the centre of the Khone Falls.

Hypothesis:

Hemibagrus filamentus comprises multiple populations that undertake short local migrations at the onset of the flood season. The migrations are triggered by a combination of changes in water level and turbidity as well as the first rain-fall. Spawning occurs in the early flood season, during May-June, and adults and young-of-the-year move out into the flood-plain areas, where they spend the flood season. When water begins to recede at the end of the flood season, the fish return to the river channels.