(b) Wallago attu

The distribution of *Wallago attu* is from the Mekong delta up to northern Lao PDR and Thailand. Reported to grow to over 90 cm, it is one of the large Mekong species. Rainboth (1996) stated that the fish reach a size of 200 cm.

There is some confusion as to what degree the species migrates in the Mekong mainstream. However, there appears to be consensus between fishermen in the four survey countries that the species migrates to smaller streams, canals and the floodplain at some stage during the flood season. During the dry season, this species lives in deep pools. The migration appears to have the dual purpose of (a) pursuing food, especially at the time where smaller fishes are migrating, and (b) spawning.

Eggs were reported to be present in the abdomen of *Wallago attu* from March to October, with most fishermen reporting eggs from May to July. Juveniles smaller than 4 cm are found from June to December, with an apparent peak during October-November. One fisherman in Chiang Khong, northern Thailand, reported that: "In June-July, groups of fish larger than 2 kg spawn in shallow water on flooded grassland. The eggs attach to the substrate and hatch within three days." Another Thai fisherman in Loei province reported personally observing spawning in the Huai Kid reservoir near the mouth of the Huai Kid stream. Small juveniles were also observed in a swamp in Chiang Rai province of Thailand. One Vietnamese fisherman reported that the fish breed in ricefields.

The timing of spawning coincides with that reported by Bardach (1959), who stated that *Wallago attu* spawns from May to October, with peak activity from July to September.

Hypothesis:

Wallago attu only undertakes short longitudinal migrations to the nearest stream, as well as some localised movements to pursue schools of smaller fish on which it preys. During the flood season it stays in swamps, canals and streams on the flood plain, where it also spawns. When the water level in the Mekong mainstream drops and the floodwater recedes, *Wallago attu* migrates to the Mekong River or larger tributaries, where it lives in deep pools until the next inundation period.

(c) Wallago leeri

Although *Wallago leeri* appears to be less common than the congeneric *Wallago attu*, it has almost the same distribution range, i.e., from about 50 km from the Mekong delta to the northernmost stations in Thailand.

Like its relative, *Wallago leeri* attains sizes larger than 90 cm. One fisherman in Chiang Khong, northern Thailand, said the species attains a maximum weight of 80 kg. The maximum size recorded by Rainboth (1996) was 145 cm.

The present survey produced limited data on the migrations of this species. The data on downstream migrations nevertheless follows a general pattern. In Cambodia, downstream migrations begin in May and end in July. Fishermen at one station in the Lao PDR and one station in Thailand concurrently reported that *Wallago leeri* migrates downstream during October-November. The data for the timing of upstream movements are too sparse to allow any interpretation.

Fishermen in the Lao PDR and Thailand agreed that *Wallago leeri* migrated into smaller streams to spawn. One Lao fisherman reported that the fish migrated in groups. One Thai fisherman explained that the species could normally be found in small Mekong tributaries when the water level started rising, especially after heavy rain. Detailed information on the movements of this species in Cambodia and Viet Nam is not available.

Eggs were observed in the abdomen of the fish from April to October, with the majority of observations being reported between May and July.

One fisherman in Chiang Khong reported personally observing the spawning of *Wallago leeri*. He also reported that *Wallago leeri* spawns in flooded grassland in July, that it spawns at night, and that it breed in deeper water than *Wallago attu.* When breeding, the fish swim in pairs, and the eggs are spawned near the surface.