

Dascyllus aruanus (Linnaeus 1758)
Whitetail Dascyllus



Photo by J. Randall, Bishop Museum

Identification: The species is distinctly colored; white with black bars and solid black pelvic fin. Large white spot between eyes. Dorsal fin XII (11-13), anal fin II (11-13), pectoral rays 17-19. Grows to 8 cm TL. Also called Humbug Damselfish, Threestripe Damselfish, White-tailed Damselfish. From Allen et al. (2003) and Randall (2005). A key to the *Dascyllus* is given in Randall and Allen (1977).

Similar Species: Sergeant Major (*Abudefduf saxatilis*) and Night Sergeant (*Abudefduf taurus*) have black bars on body, similar to the Whitetail Dascyllus. However, the bars on these species do not extend onto pelvic fins as in Whitetail Dascyllus. The body bars of the Night Sergeant extend only partially onto the belly. Additionally, the Sergeant Major is distinguished by the yellow background coloration across upper dorsal region.

Native Range: Throughout most of the Indo-Pacific from the Red Sea and east coast of Africa to French Polynesia, and Ryuku Islands to New South Wales and Lord Howe Island. From Randall (2005).

Ecology: The species lives in groups of up to about 30 individuals that shelter among branching corals at depths of one to 12 meters. Individuals leave their coral shelter to forage in the water column on zooplankton. Home territories are small and guarded fiercely. Mating occurs among fish that either form pairs or small groups of three to six that operate as a harem with a dominant male and several females. Female rank in the harem system is based on body size, with the largest female having the

highest rank. Males create a nest by clearing algae and detritus from the site, usually at the base of a coral colony. Females are then enticed to spawn with the male when he performs a characteristic courtship dance composed of a series of rapid up and down swimming movements about one meter above the nest. One male may spawn with several females, each depositing up to 2,000 eggs into the nest. Eggs are elliptical and 0.7 to 0.8 mm in length. Males aggressively guard the eggs while in the nest, fanning them with his pectoral fins and keeping the site clean of debris. Eggs hatch after about 44-51 hours into larvae that are approximately 2 mm total length. The species is known to live for at least nine years in captivity. From Randall and Allen (1977), Allen et al. (2003) and Randall (1983 and 2005).

For more information on the ecology of the Whitetail Dascyllus, see Fricke and Holzberg (1974), Sale (1970, 1971a, 1971b, 1972a, 1972b), Coates (1980), Sweatman (1983 and 1988), Forrester (1991) and Planes et al. (1993).

Nonindigenous Occurrences: In Florida, one individual was observed off Riviera Beach (Palm Beach County) in April, 2009. This fish was removed by REEF the next day and sent to the National Aquarium (Baltimore, Maryland).

