

NOTES

**AN ALBINO BAT RAY, *MYLIOBATIS CALIFORNICA*,
FROM THE PACIFIC COAST OF
BAJA CALIFORNIA SUR, MEXICO**

During June 1989, the shrimp vessel BAHIA MAGDALENA III made an exploratory fishing cruise along the Pacific coast of Baja California Sur, Mexico. Such vessels fish a pair of bottom trawls (approximately 10 m opening and mesh size 3 cm). On 18 June various hauls were made off El Ramoso, a locality on the Pacific side of Magdalena Island (which bounds the northern end of Magdalena Bay) at about 25° N. Included in the catch were a number of bat rays, *Myliobatis californica* Gill, 1865. All were of the normal dark brown on the upper side, except for one, which was an albino. This species has a distributional range from Gulf of California to Oregon (Miller and Lea 1972).

The albino is catalogued as No. 2049 in the fish collection at the Centro Interdisciplinario de Ciencias Marinas (CICIMAR) in La Paz, Baja California Sur, Mexico and is preserved in 70% ethyl alcohol. Standard length is 340 mm and disc width is 735 mm. At the time of capture the upper side was pure white, but with faint darker marks resulting from damage in the net. The color of the eyes also differed from the normal black, being yellow-orange. After fixation in formalin and subsequent preservation in alcohol the body has become grayish and the eyes have darkened to the same tone as the rest of the head region.

The fact that this albino was captured with a school of normally colored individuals suggests that the lack of pigmentation was of no disadvantage in schooling activities. Although no food was found in the digestive tract, the size of the fish was comparable to those with which it was caught, showing that albinism had not impaired feeding and growth. The fish is a female with apparently normally developed gonads.

There appear to be rather few records of albinism in batoid fishes. Traquair (1873) recorded an albino thornback ray, *Raja clavata*, and Joseph (1961) an albino cownose ray, *Rhinoptera bonasus*, but I have not found any further records. Judging by the literature, albinism is more common in sharks (e.g. Herald 1953; Herald, Schneebeli, Green, and Innes 1960; McKenzie 1970; Gopalan 1971; Talent 1973; and Cohen 1973). Presumably albinism is less disadvantageous in free-swimming fishes than in those that spend more time on or near to the substrate.

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—*Marcos de Jesus-Roldan. Laboratorio de Ictiologia. Centro Interdisciplinario de Ciencias Marinas, Apdo. postal 592; La Paz, B.C.S., Mexico. Accepted for publication January 1990.*

OBSERVATION OF BLACK BEAR, *URSUS AMERICANUS*, FEEDING DAMAGE TO PORT ORFORD CEDAR, *CHAMAECYPARIS LAWSONIANA*, IN DEL NORTE COUNTY, CALIFORNIA

Black bear feeding damage to coast redwood, *Sequoia sempervirens*, is not a new phenomenon and has been reported in California for over 38 years (Fritz 1951, Glover 1955, Giusti and Schmidt 1988). Authors throughout the United States have documented damage by bears to other conifer species, including white spruce, *Picea glauca* (Lutz 1949); Alaska-yellow cedar, *Chamaecyparis nootkatensis* (Hennon 1987); balsam fir, *Abies balsamea* (Zeedyk 1957); Douglas fir, *Pseudotsuga menziesii* (Maser 1967, Poelker and Hartwell 1973); and western larch, *Larix occidentalis* (Mason and Adams 1987, W. Schmidt 1987). This report is the first known documentation of black bear feeding on Port Orford cedar, *Chamaecyparis lawsoniana*.

The location of the damaged trees is in the Dominie Creek drainage, east of the town of Smith River, California. The damaged Port Orford cedar was discovered in one of three belt transects (10m × 100m) established to quantify black bear feeding damage to second growth redwood (Giusti, unpubl. data). The damaged cedar is 10.5 inches d.b.h. and stands approximately 25 feet tall. It is adjacent to the road and among a number of damaged redwoods. The feeding scars to the cedar are similar to those described by Glover (1955), Giusti and Schmidt (1988) and Giusti (1988) to coast redwood. In this case, the tree was nearly 100% girdled at its base with the bark removed upwards in long strips. Though the needles of the tree were still green, the tree was showing signs of rapid decline. Redwoods in the immediate vicinity were damaged during the spring of 1985 and 1986. Since the cedar was not marked, as were the redwoods at the time the damage occurred, the cedar was damaged at a later date. Because of the severity of the girdling, and the tree showing signs of decline, the damage most likely occurred during the spring of 1988. Spring is the