The False Catshark, *Pseudotriakis microdon* Brito Capello, 1867, New to the Fish Fauna of Atlantic Canada

JOHN GILHEN and BRIAN W. COAD

[1]Nova Scotia Museum of Natural History, 1747 Summer Street, Halifax, Nova Scotia B3H 3A6, Canada
[2]Canadian Museum of Nature, P.O. Box 3443, Station D, Ottawa, Ontario K1P 6P4, Canada

Gilhen, John, and Brian W. Coad. 1999. The False Catshark, *Pseudotriakis microdon* Brito Capello, 1867, new to the fish fauna of Atlantic Canada. Canadian Field-Naturalist 113(3): 514–516.

We report the capture, and provide a description and measurements, of the first False Catshark, *Pseudotriakis microdon*, in Canadian waters. This is only the third record of this sole member of the family Pseudotriakidae from the western North Atlantic.

Key Words: False Catshark, *Pseudotriakis microdon*, new record, fish fauna, Canada.

An adult male specimen of the False Catshark, *Pseudotriakis microdon* (Family Pseudotriakidae), measuring 223 cm total length was caught by a halibut trawl, baited with mackerel, at 2100 hours on 20 February 1994. It was taken at a depth of about 558 m in an underwater canyon known to fishermen as "Southwest Cove" about 88 km east of Sable Island and 358.4 km east of Sambro, Halifax County, Nova Scotia at 44°12′N, 58°25′W. This is the first record for this rare species from Canada (Scott and Scott 1988; Coad 1995). The specimen is catalogued in the Nova Scotia Museum of Natural History, Halifax under NSM12550.

Description

This species of large, soft-bodied catshark is the only member of its family and is uniquely distinguished from all other sharks by the extremely long, low and rounded first dorsal fin, which is longer basally than the caudal fin (Figure 1). The body is elongate and the head relatively small. An anal fin is present. There are no spines in the fins. The snout is moderately elongate. The spiracles are large, about equal to eye length, and the nostrils are not connected by a groove to the mouth. Teeth are very small and number over 200 in each jaw. The mouth is large and angular. Each tooth has a narrow cusp and well-developed lateral cusplets. Posterior teeth are comb-like. The elongate eyes have a poorly developed nictitating eyelid (Figure 2). There are five small gill slits, the last two lying over the pectoral fin base. The caudal fin lacks precaudal pits and keels and is not lunate.

Measurements in percent of total length are: snout tip to eye 5.6, snout tip to mouth 5.2, snout tip to pectoral fin origin 17.7, snout tip to first dorsal fin origin 31.6, snout tip to second dorsal fin origin 65.2, snout tip to upper caudal fin origin 82.1, distance between dorsal fins 11.2, distance between second dorsal fin and caudal fin 4.5, mouth width 11.9, horizontal eye diameter 2.5, length first dorsal fin base 22.4, height of first dorsal fin 4.5, length anterior pectoral fin margin 10.3, length dorsal lobe of caudal fin 17.9, distance between spiracles 5.6, distance between outer ends of nostrils 5.6, and distance between pectoral fin tips across belly 28.3.

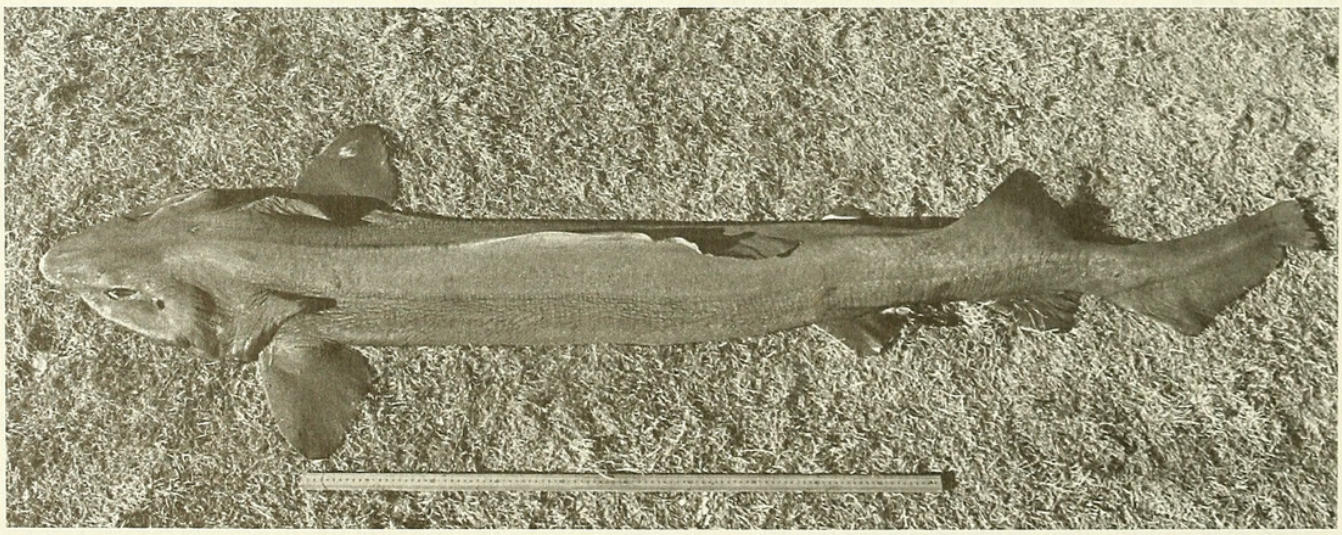

FIGURE 1. False Catshark, *Pseudotriakis microdon*, NSM12550, southeast of Sable Island, Nova Scotia.

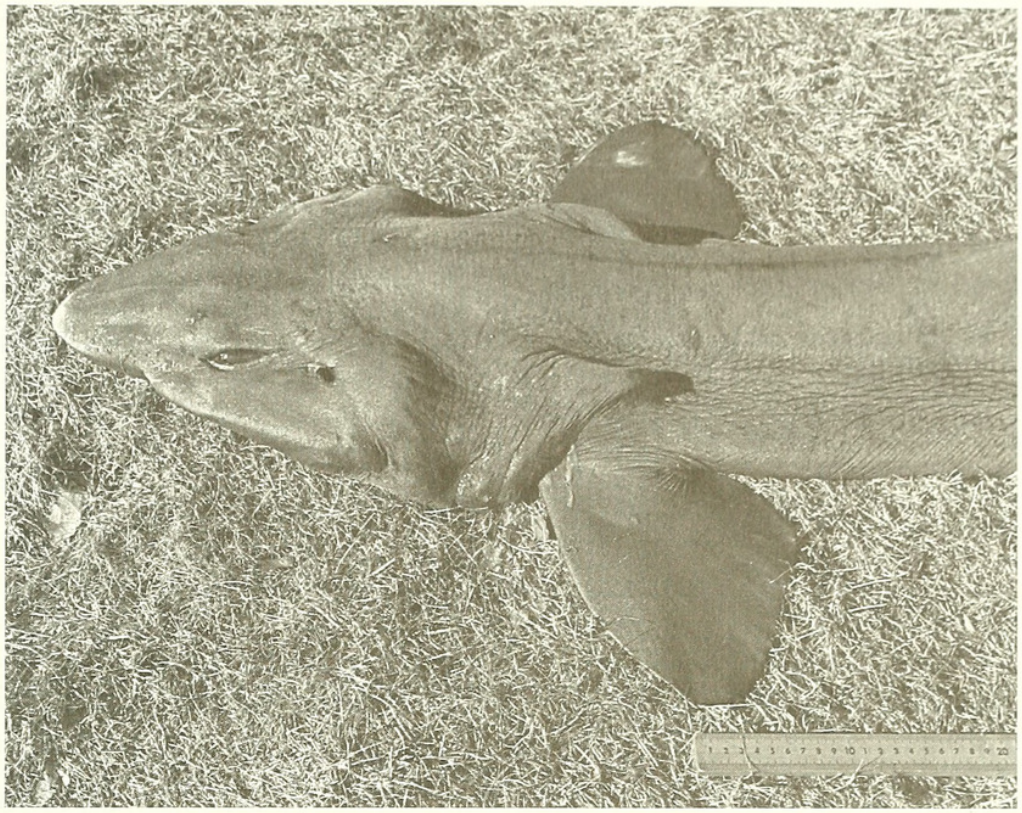

FIGURE 2. Close-up of head of False Catshark, *Pseudotriakis microdon*, NSM12550, south-east of Sable Island, Nova Scotia.

The body is a slate-grey colour with no evident markings. Literature reports state that the body is dark brown in some specimens. Fins are generally darker than the body although in this specimen the first dorsal fin is lighter. Maximum size in the literature is 2.95 m total length for females and 2.7 m for males. The description agrees well with those in Bigelow and Schroeder (1948), Compagno (1984, 1988), and Yano and Musick (1992).

The catshark was caught with 3178 kg of Atlantic Halibut, *Hippoglossus hippoglossus*, and a small number of Spiny Dogfish, *Squalus acanthias*. The False Catshark had been gutted and dressed at capture and then weighed 31.5 kg. The stomach is reported as containing nothing recognisable, just a "jelly-like liquid". Food is reported elsewhere to be predominately benthic bony fishes but also sharks, scavenged moribund or dead fish, squids and octopi, along with garbage from human activities (Yano and Musick 1992). It is an oophagous species, the embryos feeding while in the uterus on yolk material contained in ova produced by the ovaries (Yano 1992). Litter size is two as a result, one young in each uterus.

This species is known world-wide from the deep waters of continental shelves between 200 and 1500 m including the western North Atlantic with one washed ashore at Amagansett, Long Island, New York, on 3 February 1883 (USNM 32516) and probably one from a pound net at Manasquam, New Jersey, in July 1936 (Bigelow and Schroeder 1948). Shallow water records may be abnormal (Compagno 1984). The specimen described here is the first recorded from Canadian waters and only the third from the western North Atlantic.

Acknowledgments

We are indebted to Robert Ackman, Canadian Institute of Fisheries Technology for notifying us of this specimen and for depositing it at the Nova Scotia Museum of Natural History. Details on the capture site were provided by Frank Reyno, captain of the longliner *Short 'n Sassy*. Ron Merrick, Media Services, Nova Scotia Department of Education, did the photography.

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Received 30 September 1998
Accepted 17 November 1998

Six-egg clutches of the Mountain Plover, *Charadrius montanus*

STEPHEN J. DINSMORE and FRITZ L. KNOPF

U. S. Geological Survey, Biological Resources Division, Midcontinent Ecological Science Center, 4512 McMurray Avenue Fort Collins, Colorado 80525-3400, USA

Dinsmore, Stephen J., and Fritz L. Knopf. 1999. Six-egg clutches of the Mountain Plover, *Charadrius montanus*. Canadian Field-Naturalist 113(3): 516-517.

Three six-egg clutches of the Mountain Plover (*Charadrius montanus*) represent the largest clutch size ever reported for this declining Great Plains shorebird. Clutch size in this species is normally three eggs, and six-egg clutches probably represent the laying of a second clutch in the nest by the same female.

Key Words: Mountain Plover, *Charadrius montanus*, clutch size, Montana.

Mountain Plovers (*Charadrius montanus*) are a declining shorebird of the western Great Plains breeding from southeastern Alberta south to Texas (Knopf 1996a). Nearly all clutches of this species contain three eggs (Graul 1975; Knopf 1996b). Four-egg clutches have been reported on six occasions (Graul 1975; Hamas 1985; Knopf 1996b). Herein, we report three incidences of six-egg clutches in the Mountain Plover.

On 2 June 1997, we found a Mountain Plover nest containing six eggs in southern Phillips County, Montana (47°38′N, 108°01′W; cover). The nest was on a small (4 ha) Black-tailed Prairie Dog (*Cynomys luduvicianus*) colony on Bureau of Land Management lands, just north of the Charles M. Russell National Wildlife Refuge boundary. All of the eggs were very similar in size, shape, colouration and marking patterns, suggesting that they were laid by a single female. Mountain Plovers lay eggs that vary widely in these traits among females, with eggs from different females almost always being distinctive (personal observation).

Floatation of the six eggs revealed that all eggs were at least three weeks old. The adult was trapped and colour-banded. On 5 June, the colour-banded adult was incubating all six eggs. The eggs were floated again and determined to be within a few days of hatching. On 12 June, the nest was empty. Lack of disturbance to the nest and presence of minute egg-shell fragments in the nest cup (Mabee 1997) indicated it hatched successfully, probably around 10 June. Although we cannot be sure, it is likely that all six eggs hatched because unhatched eggs in other Mountain Plover nests often remain untouched for weeks (personal observation).

On 24 June 1998, we found another six-egg clutch at Fort Belknap Indian Reservation in Blaine County, Montana (48°20′N, 108°28′W). All of the eggs were very similar in size, shape, colouration and marking patterns, suggesting that they were laid by a single female. Floatation of the six eggs revealed that they were nearly four weeks old and within 1-2 of days of hatching. The adult was trapped and colour-banded. We did not return to the nest-site until 14 July, at which time the nest was empty. Using eggshell evidence (Mabee 1997), we inferred that the nest hatched successfully, although we never saw the adult and young again.

We recently learned of a third six-egg clutch of the Mountain Plover. Kari Bartosiak photographed that clutch on 21 May 1992 on the Thunder Basin National Grassland, approximately 30 km north of Bill, Converse County, Wyoming (43° 12′ N 105° 18′ W). The photograph of that clutch also showed six eggs of similar size, shape, colouration, and markings. The ultimate fate of that nest was not certain, but five eggs were still present and being incubated on 10 June 1992.

Clutch size in Mountain Plovers is highly consistent. Ninety-one percent of 108 nests on the Pawnee National Grassland in northeastern Colorado (Knopf 1996b) and 89% of 371 nests in Phillips County, Montana (SJD) contained three eggs. Incomplete clutches and partial predation of the nests may have biased these figures downward. Four-egg clutches are rare in Mountain Plovers. We have observed two four-egg clutches, one each on the Pawnee National Grassland and in Phillips County. The latter nest contained a runt egg that failed to hatch (SJD). Of two additional four-egg clutches on the Pawnee, only