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Posted on Sun, Mar. 04, 2007

OUTDOORS | WHITE MARLIN STUDY

A mistaken identity

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The white marlin you thought you were catching and releasing off South Florida and points north might not have been white marlin at all, but a newly confirmed billfish species known as the roundscale spearfish.

And the recently discovered mistake could boost efforts to have the white marlin listed as an endangered species.

A new study out of the Guy Harvey Research Institute at Nova Southeastern University, led by Institute director Mahmood Shivji with scientists from NOAA Fisheries in Miami, used DNA analysis to confirm the roundscale spearfish is a distinct species from others it closely resembles -- the roundbill and longbill spearfish and the white marlin.

Shivji notes there are two ways to tell the roundscale from the others by examining the body, but those methods require a trained observer. The scales on the side of the new species' body are much rounder than all other Atlantic billfish. The other difference involves taking a measurement from the fish's anal opening to its anal fin and calculating the ratio of that distance to the height of the fin.

The finding is important because of widespread misidentification of the new species as the heavily exploited white marlin. Stock assessments by scientists from the International Commission for the Conservation of Atlantic Tunas (ICCAT) show that white marlin are at about 12 percent of the level needed to sustain the population. That finding has prompted calls by some conservation groups to have whites listed as endangered, which could have profound implications for recreational and commercial fishing in South Florida and elsewhere.

The confirmation of the new species means that white marlin populations could be even lower than previously calculated.

"There's another species out there that nobody's recognized," Shivji said. ``The conundrum is, what proportion of fish that have been caught and landings used as part of the white marlin [assessment] are not white marlin, but roundscale spearfish? Clearly, it's something that needs to be looked at."

Shivji said it wouldn't be a bad idea for billfish tournaments in which white marlin frequently are caught and released to institute a policy of taking a fin clip from each fish for DNA analysis -- a process that wouldn't harm the fish.