

Mail Buoy



Turtle Soup?

■ In the August *HAWAII FISHING NEWS* "Splash!" column, my friend, colleague and fellow fisherman Bob Duerr cited a recent article on green sea turtles that claims to estimate the loss of historic nesting beach sites and suggests it may be premature to consider delisting Hawai'i green turtles under the Endangered Species Act (ESA). At first read, the article seems reasonable and well-documented. On a more careful read, the article has some flawed assumptions. I've put on my fishery social scientist hat and drawn from my experience working with archeologists on midden and bone analysis to provide this comment.

The article mines a massive database that includes a sizeable number of historical accounts and archeological reports that include midden (faunal) analysis and reference to turtle bones. Midden analysis depends greatly on the experience of the analyst and is only as good as the analyst and the reference collection they are using. This is why many site reports only say unidentified fish bone, mammal bone, etc. Many factors influence the presence/absence of any bone in archeological sites, and samples are not very representative of localized activities.

People with training and experience in archeology know that extrapolations from bone presence in archeological sites to localized human activity should only be done with great caution. Reports of turtle bone presence should not be extrapolated to always indicate evidence of a nearby nesting beach. Basking turtles and swimming turtles could be harvested by a variety of methods, and turtles could sometimes be placed under *kapu* by chiefs and their *konohiki* and, hence, harvested elsewhere and taken to a chiefly residence. It should also not be assumed that all identified turtle bone in midden is from green turtles. While hawksbill were probably not eaten, they were harvested for important chiefly regalia and fishhooks.

The decision as to whether or not to delist the Hawai'i green turtle should be based on the best available science. This article does not, in my view, meet that standard.

Craig Severance, Ph.D.
Hilo, Hawai'i