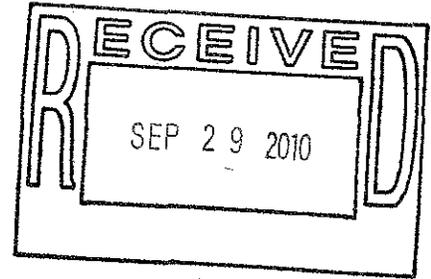


Subject: Management of shipwrecks in Hawaii
From: Richard Gould <rgould49@gmail.com>
Date: Wed, 01 Sep 2010 16:09:28 -1000
To: Hans Van Tilburg <Hans.VanTilburg@noaa.gov>



Dear Hans,

I appreciated your invitation of August 25 to have me comment during the management plan review period for the Humpback Whale Sanctuary. I have read the Condition Report for 2010 as well as the "State of the Sanctuary" for Summer 2010, so I have a much better idea now of the issues involved, especially in relation to historical resources. The results so far in surveying and monitoring the condition of the whales as well as pro-active programs such as removal of debris and entanglements are commendable, and any suggestions I can offer here should not be viewed as detracting from NOAA's current whale-oriented research and amelioration efforts. The data gathered through the SPLASH program is especially valuable but also raises questions about the need for commensurate efforts in matters of reef ecology and cultural and historic preservation within the Sanctuary.

My past experiences with the National Park Service (specifically, in the Dry Tortugas National Park, FL) and with the Bermuda Maritime Museum suggest that a comprehensive management plan for the Sanctuary would produce benefits not only for the whales but also for the total biotic environment and submerged cultural resources it contains. A piecemeal approach to the Sanctuary should be avoided if the total ecosystem within the Sanctuary is to be adequately preserved and protected. Although humpback whales will remain the centerpiece of the Sanctuary's activities, they should be viewed as connected to a larger ecosystem that deserves equal preservation. Current NOAA efforts at monitoring water-quality point in that direction already, but there are other factors to consider:

--- It's always hard to sell the idea of historic or cultural preservation in the face of pressures to protect natural species. Organizations like Parks Canada and the U.S. National Park Service have increasingly recognized the value of cultural and historic preservation, and such was also the case at the site of the USS "Monitor" (which I understand was the first NOAA Sanctuary), so this is not a radical suggestion. The lesson of these past experiences is that the "culture vs. nature" dichotomy is misleading and unhelpful. Compartmentalized approaches are not pathways to good preservation.

--- As noted in the Condition Report, shipwrecks can be destructive to marine habitats, especially if they contain fuel or unexploded ordnance. These potentially damaging elements need to be identified, monitored, and ameliorated whenever possible. But shipwrecks (and perhaps wrecked aircraft as well) can also be beneficial. It is a truism that wrecks can serve as artificial reefs, but this process of reef formation needs to be recognized, monitored, and evaluated, too. Controlled benthic surveys on wrecks within the Sanctuary to measure biodiversity and biomass of species that colonize wrecks are needed. Keep in mind that the date or year of loss is usually known for each wreck, so these are unique opportunities to measure this process of colonization since the wrecking date. This, of course, would be relative to the natural reef or seabed species in the vicinity of the wreck. Each wreck presents a kind of "biotic clock" that allows managers to observe and measure this process.

--- Measurement and evaluation of biotic conditions within the Sanctuary could be important activities for community-based and volunteer participation. From personal experience I can say that sport divers -- often with considerable experience and special skills like underwater photography -- who are willing to accept training can become powerful advocates for natural and cultural preservation. This includes divers who may previously have looted shipwrecks or removed corals or other aquatic species. They can become protective agents toward the very reefs and wrecks they damaged in the past. Dive shop owners and operators also find that the preservation of reefs and wrecks are good for their businesses, especially where tourism is a major factor. It's not easy to change people's minds

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about major issues like treasure hunting and the taking of marine species, but this kind of "hands-on" involvement is a proven and effective way to do it.

--- In terms of management, a holistic, ecosystemic approach can provide effective protective measures that a piecemeal approach cannot. For example, shipwrecks that are open to the public for sport diving can be overwhelmed with divers, damaging adjacent reefs as well as the wrecks themselves. Too many dive or snorkel boats in one place at one time can tear up the reef with their anchors. An effective ecosystemic management plan would put out a limited number of moorings on the reef and require that dive or snorkel boats be moored or else wait their turn, thus reducing pressure on the wreck and reef. For such an approach to work, however, there has to be a willingness to recognize the interrelatedness of historic and natural marine resources and their management.

In short, the submerged resources within the Sanctuary should be regarded and preserved as a total ecosystem that includes biotic and cultural elements other than whales alone. A "single-species" approach to management may help the whales but not much else. I urge, therefore, that an ecosystemic model that includes cultural and historic preservation and the reef environment should be considered for adoption by NOAA toward the Hawaiian Islands Humpback Whale National Marine Sanctuary.

Sincerely,
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