August 24, 2010

Jack Travelstead
Marine Resources Commission
2600 Washington Avenue, 3rd Floor
Newport News, VA 23607

Dear Jack:

We are writing to express our concern over the potential for rapid expansion in the unregulated Virginia-based fishery for cownose rays *(Rhinoptera bonasus)* and the subsequent risk for serious overfishing of the population. We respectfully request that you take immediate action to begin the management and assessment process in order to safeguard this vulnerable species. Our related concerns regarding misconceptions about the cownose ray population size and impact are detailed below.

As you are likely aware, Virginia-based fishing interests are gaining ground in their efforts to promote targeted fishing, new markets, and eradication programs for cownose rays through governments, seafood shows, the media, and their "Eat a ray, save the bay" campaign (which suggests cownose ray consumption is good for oysters and thereby the environment). Central to their arguments are claims that the cownose ray population has "exploded" and is threatening recovery of various bivalves and associated livelihoods.

We remind you that cownose rays are among the least fecund marine vertebrates. Females mature around age eight and usually produce just one pup per year after an 11-month gestation period. Large scale, unregulated removal of a similar South American species, *Rhinoptera brasiliensis*, led rapidly to population depletion; this ray has since been classified as *Endangered* by the International Union for Conservation of Nature. It is clear that such species are exceptionally vulnerable to overexploitation and must be managed promptly and carefully if their catches are to be sustainable.

Many leading elasmobranch scientists, including those signing this letter, dispute the claims that cownose rays have dramatically increased in number in recent years. As this controversial notion is gaining acceptance, there is an urgent need for a dedicated population assessment to determine the current status of cownose rays and safe catch levels.

We appreciate that commercial fishermen are concerned about cownose rays preying on oysters, clams, and other commercially important bivalves. We argue, however, that programs to promote unregulated fishing or eradication of rays are not responsible responses. It is important to recognize that impacts from cownose rays on these bivalves and associated fisheries are associated primarily with on-bottom aquaculture operations which seed exceptionally high densities of cultchless oysters. Furthermore, recent research has shown that cownose rays are quite limited in terms of gape and bite force (Fisher et al., manuscript in preparation). Most commercially valuable bivalves can therefore outgrow predation risk. Techniques involving delayed planting, decreased densities, and/or physical barriers (such as stockades or cages) to protect small bivalves warrant further exploration.

There are also potential indirect, negative effects on bivalves associated with depleting rays. Gray et al[1] (1997) found that the California oyster industry's bat ray eradication program may have actually increased oyster mortality, as it was revealed that the rays were not feeding on oysters but rather on oyster-associated species including oyster predators (such as crabs).

We have all seen first-hand the consequences of delaying fishery management for slow-growing elasmobranchs, right in this very region. Fishing restrictions lagged behind development of fisheries for large coastal sharks and spiny dogfish. As the number of fishermen entering the new ventures grew, so did the obstacles to agreeing and imposing effective regulations. Population damage increased with management delays, creating the need for increasingly drastic action and resulting in recovery periods that span decades or more. It is high time we learned the lessons from these experiences and ensured a more cautious approach to elasmobranch fisheries.

For all of these reasons, we urge you to take on assessment and proactive management of cownose ray as a matter of priority, beginning immediately with precautionary, state limits on fishing. We offer our assistance in achieving these goals.

Thank you for your consideration and attention to this pressing matter.

Sincerely,

Sonja Fordham
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Shark Advocates International

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[1] *Gray, A. E., T. J. Mulligan, and R. W. Hannah. 1997. Food habits, occurrence, and population structure of the bat ray, Myliobatis californica, in Humboldt Bay, California. Environ. Biol. Fish 49:227–238*