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***MarineFisheries* Advisory**

UPDATE TO SALTWATER ANGLERS ABOUT STRIPED BASS SKIN DISEASE

The striped bass skin disease reported in a recent Boston Globe article is not a new disease to fish biologists and is not considered a serious health risk by regional public health agencies. It is known as *Mycobacteriosis* and was first identified on striped bass in Chesapeake Bay in 1997. Fish that contract this disease develop a bacterial infection that results in inflammation, tissue destruction and formation of scar tissue in one or more organs. While *Mycobacteriosis* can be transmitted to humans through direct contact with infected fish or water, this disease can be treated with antibiotics; the bacteria responsible for this disease are not flesh-eating. Any persons with questions or concerns should contact a physician.

Myobacteriosis in Striped Bass
Signs of infection in striped bass are first noted in internal organs such as the spleen and kidney. Nodules (called granulomas) composed of inflammatory cells and fibrous connective tissue form in response to the bacteria in an attempt to stop the infection. An increase in the number and size of granulomas leads to the formation of extensive scar tissue and eventual loss of normal tissue architecture. This disease progresses slowly in fish and has been characterized as a "wasting disease" due to loss of body mass and emaciation. Striped bass may contract the disease because of weakened health caused by poor water quality and forage-related issues in Chesapeake Bay.

Many striped bass from Chesapeake Bay reside in coastal waters of Massachusetts between May-October. However, *MarineFisheries* has not received any reports of external lesions and has not observed any internal signs of the disease in fish examined over the last two years. We are unsure why the disease has not been observed in Massachusetts, but some scientists suggest that the Chesapeake Bay migratory stock may be less susceptible to disease because they stay only about two months in the Bay to spawn and have reduced chances of exposure (most of the fish reported to have the disease in Chesapeake Bay are the year-round residents) or the disease is eliminated or becomes lessened once the fish move into colder, cleaner, ocean water and experience better food supplies.

Anglers have inquired if striped bass that have been "tainted" with *Mycobacteriosis* are still edible. The answer is yes! A recent check of published medical studies by Maryland Department of Health on this kind of infection in human beings shows that eating properly prepared and cooked rockfish has not been associated with human mycobacterial illness. They recommend that people not consume any raw striped bass or any fish that appears diseased. In preparing striped bass for consumption, common sense should prevail. Fish with open, reddened lesions on the body or with signs of hemorrhage or darkened patches in the fillets should be discarded. Fish that

appear to be healthy and are properly cooked are safe to eat. While handling an infected striped bass, especially if the skin is cut or scraped, can lead to skin infections, simple hygiene precautions can prevent this.

Human Myobacterial Illness Is Treatable

Infections in humans are generally limited to the extremities such as fingertips and feet, but may involve the joints, bones and lymph nodes. Individuals with cuts or scrapes are at higher risk for infection. The most frequent symptom is the formation of a persistent bump or nodule under the skin. Additional symptoms may include the formation of ulcers, swelling of lymph nodes and joint pain.

When handling any type of fish, use a few practical and simple precautions: 1. wear heavy gloves and boots to avoid puncture wounds from fish spines; 2.If cuts, scrapes or other open or inflamed areas of the skin are present, cover hands and wrists with an impermeable barrier (like a rubber or vinyl glove) to prevent any bacteria from getting into the soft tissue under the skin where *Mycobacterium* organisms are known to cause infections; 3. Dispose of any leftover fish parts after preparing raw fish; 4. Wash off all cutting boards, surfaces, knives and other utensils used to process raw fish with warm soapy water. (Source: Maryland Department of Natural Resources.) Again, this disease can be treated with antibiotics, and any persons with questions or concerns should contact a physician.

For further information please visit our website at: www.mass.gov/marinefisheries.