

FISHERIES NEWS (from page 30)

Researchers, concerned that fish living in cramped farms may be stressed out, were looking for something to help the fish chillax. But pot, it seems, is not the answer.

For starters, fish fed THC-laden edibles didn't seem to be surviving any better than fish fed a control diet, which the researchers took to mean that the drugs were not helping the fish deal with the stress of pen life. It's possible, however, that the fish simply built up a tolerance after receiving the same amount of THC every day for two straight weeks. (Researchers saw a similar habituation in Siamese fighting fish back in 1971.)

As for growth, the researchers found that feeding fish pot oil does give their metabolism a boost. Recreational marijuana users will recognize this phenomenon as "the munchies."

"[B]ut they were not given extra food to make up for this metabolic increase," says Patrick Saoud, an aquatic scientist at the American University of Beirut and lead author of the study. "So they used what food they got for energy rather than building blocks for growth."

Of course, farmers could give the fish pot and then feed them more food, but doing so would cut into profit margins, so Saoud says it's unlikely that any fish farmers will be investing in the drug anytime soon.

Saoud didn't have to visit any street corners to source his product. Instead, he spoke with Lebanon's attorney general, who said no one had ever asked for such a thing before, but there was no law against it. In the end, the police were able to hook up Saoud with cannabis from their evidence locker.

As for the prospects of commercially available pot-reared fish, Saoud and his coauthors' conclusion is a real downer: "Until further research yields different results, we do not believe fish should be given reefer."

Maine fisherman sentenced for illegally trafficking American eels

Richard D. Austin was sentenced to 24 months' imprisonment yesterday for trafficking juvenile American eels (also called "elvers" or "glass eels") in violation of the Lacey Act, following a hearing in federal district court in Norfolk, Virginia. The sentence was announced by Acting Assistant Attorney General Jeffrey H. Wood for the Justice Department's Environment and Natural Resources Division and United States Attorney for the Eastern District of Virginia, Dana J. Boente.

In April 2017, Austin, who has several previous wildlife-related convictions, pleaded guilty to violating the Lacey Act by selling elvers in interstate commerce that he had harvested illegally in Virginia and Massachusetts. Court documents indicate that Austin trafficked at least 147 pounds of elvers, which is approximately **300,000 individual eels**, and worth more than \$162,000. Austin sold these eels to exporters, who then exported them from the United States to international markets.

"Illegal harvesting and trafficking of wildlife represents a dire threat to our critical ecosystems," said U.S. Attorney Boente. "This case reaffirms our commitment to protecting Virginia's natural resources for future generations."

"Today's sentencing sends a strong message to those who choose to exploit and illegally traffic our native wildlife," said

U.S. Fish and Wildlife Service Acting Chief of Law Enforcement, Ed Grace. "We appreciate the dedication of the Department of Justice, and our partners involved in this case, and will continue to work with federal, state, and local conservation law enforcement officials to combat the illegal wildlife trade."

Eels are highly valued in east Asia for human consumption. Historically, Japanese and European eels were harvested to meet this demand; however, overfishing has led to a decline in these populations. As a result, harvesters have turned to the American eel to fill the void.

American eels spawn in the Sargasso Sea, an area of the North Atlantic bounded on all sides by ocean currents. They then travel as larvae from the Sargasso to the coastal waters of the eastern United States, where they enter a juvenile or elver stage, swim upriver and grow to adulthood in fresh water. Elvers are exported for aquaculture in East Asia, where they are raised



to adult size and sold for food. Harvesters and exporters of American eels in the United States can sell elvers to East Asia for more than \$2,000 per pound.

Because of the threat of overfishing, Atlantic Coast states have cooperatively prohibited elver harvesting in all but two states: Maine and South Carolina. Maine and South Carolina heavily regulate elver fisheries, requiring that individuals be licensed and report all quantities of harvested eels to state authorities. Other Atlantic coast states, including Virginia, have commercial fisheries for adult or "yellow" eels.

This case was the result of "**Operation Broken Glass**," a multi-jurisdiction U.S. Fish and Wildlife Service investigation into the illegal trafficking of American eels. To date, the investigation has resulted in guilty pleas for 18 individuals whose combined conduct resulted in the illegal trafficking of more than \$5 million worth of elvers.

Operation Broken Glass was conducted by the U.S. Fish and Wildlife Service and the Justice Department's Environmental Crimes Section in collaboration with the Maine Marine Patrol, South Carolina Department of Natural Resources Law Enforcement Division, New Jersey Division of Fish and Wildlife Bureau of Law Enforcement, Connecticut Department of Energy and Environmental Protection Conservation Police, Virginia Marine Resources Commission Police, USFWS Refuge Law Enforcement, National Oceanic and Atmospheric Administration Office of Law Enforcement, **Massachusetts Environmental Police**, **Rhode Island Department of Environmental Management Division of Law Enforcement**, New York State Environmental Conservation Police, New Hampshire Fish and Game Division of Law Enforcement, Maryland Natural Resources Police, North Carolina Wildlife Resource Commission Division of Law Enforcement, Florida Fish and Wildlife Conservation Commission, Yarmouth, Massachusetts Division of Natural Resources, North Myrtle Beach, South Carolina Police Department and the Atlantic States Marine Fisheries Commission.