## Missouri Caviar—Paddlefish Special Investigation

Steve Nichols, Missouri Department of Conservation, P.O. Box 180, Jefferson City, MO 65102

Abstract: One of Missouri's largest and most unique game fish, the paddlefish, faced a threat that potentially was as great as the loss of spawning grounds resulting from construction of dams. Poachers, well aware of Missouri's reputation for large concentrations of these primitive filter feeders, were reaping huge profits by illegally netting the fish and selling the roe as caviar. Covert investigators with the Missouri Department of Conservation and the U.S. Fish and Wildlife Service infiltrated groups operating on the Osage River in Warsaw, Missouri, as well as another group based on the James River of Table Rock Lake. After 18 months of work, the network that moved eggs from Missouri streams to caviar dealers throughout the country was uncovered and prosecuted.

Proc. Annu. Conf. Southeast. Assoc, Fish and Wild. Agencies 44:448-452

The paddlefish has never aroused much attention compared to more recognizable game fish such as bass or catfish, despite being one of the largest and unique in Missouri. This is due to their limited range and inability to catch them by conventional bait or lure methods. Most frequently, they are taken only during a short snagging season established during spring spawning runs.

When Truman Dam was constructed on the Osage River above Lake of the Ozarks, it was speculated that the paddlefish might suffer as a result of this obstruction of their upstream spawning migration. The unique congregation of paddlefish below Truman Dam results in Warsaw, Missouri, being the self-proclaimed "Spoonbill Capital of the World" by commercial interests, and enlightened a new covert investigator, who had been a uniformed conservation agent just 2 weeks before, that there are no such things as paddlefish and conservation agents, only spoonbill and game wardens.

Tennessee Fisheries personnel, aware of Missouri's reputation for paddlefish, warned their neighboring biologists that poachers had decimated paddlefish populations there. The poachers' interests was not in the flesh, but in the eggs, which compares favorably with the taste of sturgeon eggs sold as caviar. It was not long after that carcasses of paddlefish began showing up on the James River arm of Table Rock Lake and the Osage River with all the symptoms of being victims of egg thieves. The ventral side of each fish was slit open and the fish were discarded with only the eggs removed.

Uniformed conservation agents began making arrests for illegal taking of paddlefish and seized eggs and equipment, but the problem persisted. Stories of easy money to be made selling eggs appeared to negate the deterrent effects of arrest. Intelligence gathered by uniformed conservation agents indicated the egg buyers were from out of state. They frequently isolated themselves from arrest by hiring local fishermen to do the netting, while promising to cover bail, fines, and other expenses. Faced with the recurring problem of illegal fishing, enough money to attract every local violator, and the interstate movement of paddlefish eggs, the decision was made to work the group in a covert investigation to curb the slaughter of paddlefish.

The Missouri Department of Conservation entered into a cooperative agreement with the U.S. Fish and Wildlife Service (FWS) in January 1988. The plan involved placing 2 federal agents and 1 covert investigator from the state into the network that took, bought, and sold paddlefish eggs in violation of state and federal regulations. One FWS agent went to the heart of the operation immediately by way of an informant, who agreed to introduce the investigator as a close friend. The informant's incentive was based on mounting legal problems as a result of his own egg dealings, his professed disgust with the wasteful practice of discarding edible fish, and the possibility of a reward.

The other Federal Agent teamed up with the state officer and approached the group from another angle. The informant was unaware of the 2 additional investigators to provide security to the operation. Working in this manner provided all investigators the opportunity to be alert to possible poachers' suspicion of other members of the investigation.

The investigator working with the informant was initially mistrusted and worked under constant threats. He quickly gained their confidence, however, and accompanied a major investigation target to Tennessee where he met 1 of the egg buyers. It was clear at that time that the caviar producers went to great lengths to make their dealings appear legal, and that prosecution at that end of the operation would be difficult.

Meanwhile, the other 2 investigators rented a trailer in Warsaw, Missouri, and began making contacts with area residents. They posed as down-and-out city people who came to town looking for work amid the backdrop of one of Missouri's premier fishing areas.

They targeted a local tavern owner, looking ultimately for an introduction into the egg buying ring without going to them directly. Intelligence indicated that the target was a close confidant in whose establishment the group spent a great deal of time. Being a local resident, he was frequently telephoned by out-of-state fishermen checking water conditions and fishing success. As hoped, he ultimately introduced investigators to another egg buyer, a major target of the investigation.

The egg buyer explained that what they were doing was illegal, and not to discuss it with anyone. He explained that eggs must be kept cold but not frozen and delivered to him immediately after removing them from the fish. An investigator watched as the egg buyer processed the eggs in his home and placed them in the refrigerator until enough eggs accumulated to warrant shipment. The eggs were shipped "down south" as he referred to Tennessee.

On subsequent trips, the buyer became more comfortable with the investigators and eventually confided to them more details of the operation. He explained how a family member, elected to the Tennessee legislature, had contacted Missouri lawmakers in an effort to legalize commercial harvest of paddlefish for the eggs. The effort was not successful, despite the promise to share the wealth of money to be made with the State Conservation Department.

Ultimately, the buyer confided to the investigators that he was a commercial fisherman. He asked the investigators to go to work for him netting paddlefish. He instructed them on how to set trammel nets, how to scout the area to be fished for game wardens, and explained a series of light signals to be used while on the water. The rules were simple: do not transport eggs and nets together. Neither would result in arrest independently once off the water. It was "apparent" after a short time on the water that the investigators were for the most part, "inept" at netting and required the hands-on experience of a professional. The 90 m net, which was 7 m deep, was in the water in <2 minutes when set by the expert. At one point, investigators deviated from the plan and walked the night's take of eggs up a path to meet the buyer, instead of waiting at water's edge as instructed. As they climbed the steep path to 1 of the many trails used by the group, they looked up to see a sawed-off shotgun leveled at them. He apologized when he saw who it was, stating later that had it been game wardens, he would have shot.

Meanwhile, the Federal agent working with the informant spent most nights of April netting the Osage River with locals hired by the Tennessee fishermen. Violations were recorded on a number of different subjects for future prosecution.

The first fishing season came to a premature end in early May when uniformed conservation agents arrested a large group of netters as they came off the river early one morning. The group arrested included both Tennessee buyers, a policeman from Alabama and several others. The arrest raised suspicion among the group toward everyone involved in the investigation, including the violators themselves. The arrest came on the heels of another arrest on James River arm of Table Rock Lake and scattered the fishermen for the summer.

Discussions regarding the taking of paddlefish, or spoonbill as they are commonly referred to, indicated that the egg dealers would return in late fall and fish through the winter. Paddlefish eggs are small and immature during the winter months, but that did not discourage the group. A fish that could bear 2.7-3.6 kg of eggs in May might yield only 1-1.5 kg during winter months. Supply and demand, however, drives the price of caviar up just in time for Christmas parties and New Year's Eve celebrations.

Investigators maintained contact with locals off and on until January of the next year, when efforts to locate their business partners intensified. All indications were that illegal fishing was occurring but suspicion had driven the targets into seclusion.

Once again, investigators relied on the tavern owner to locate the fishermen. A few days later, investigators were taken to a secluded cabin on another arm of the lake; this time above Truman Dam on Truman Lake. Half the team stayed in Tennessee while the other partner teamed up with another local known for illegal fishing activities.

They told stories of fishing since November, taking as many as 40 males for every female. Being unable to sex the fish by visual observation each one was ripped open with a knife looking for the valuable egg masses. The fish were thrown back into the river to die, whether they had eggs or not.

They explained the history of paddlefish eggs as caviar. It emerged at a time when relations between U.S. and Iran were strained. Economic sanctions prevented sturgeon eggs from the Middle East from filling the demand for caviar in this country. Paddlefish, a close relative of sturgeon, were more easily obtained and were plentiful in the lakes and rivers of Tennessee.

An enterprising individual prepared paddlefish eggs for comparison with the world's finest sturgeon caviar. He took the eggs to New York where consumers are notoriously picky when it comes to their caviar. It impressed the right people and received immediate attention in the Wall Street Journal. More stories indicated just how much money could be made, including \$187,000 in one season on Table Rock Lake for 2,270 kg of eggs.

The investigators were taken to a farm where eggs were prepared. A new process for preparing eggs was demonstrated. Egg buyers hesitated revealing their secrets for fear of being cut out, but time was money and they could not afford to spend all their time working on eggs during the peak of the fishing season. Learning to process eggs was financially rewarding, as the price jumped from \$22/kg for raw eggs to \$44–55/kg for the finished product.

Eggs were first pushed through a 80 mm mesh screen in order to remove the fat and membrane. They were then flushed with water to remove blood and fat. Eggs were then placed on fine screens and allowed to drain. After most moisture had drained away, eggs were weighed and mixed with salt at a rate of 3 g/kg. They were returned to the screen where the salt dissolved the remaining blood and fat before being placed in refrigeration awaiting shipment.

While processing eggs, the buyers explained the Lacey Act and warned investigators of the stiff penalties involved for interstate shipment of eggs. Investigators spent little time on the water with the suspects. Investigators were expected to operate on their own and had occasional problems remaining credible, having established a policy early that they would not violate game laws without the presence of suspects.

At this time, a large number of paddlefish were to be removed or destroyed by the Conservation Department during renovation of a large lake containing fish previously used for brood stock. The Conservation Department director approved use of these paddlefish for the investigation. The eggs taken from just 10 of the unusually large females enabled investigators to appear successful in the eyes of the suspects, while acquiring eggs from a legal and legitimate source.

The next few months involved obtaining a better understanding of the movement of eggs. At the same time, an investigation began at Table Rock Lake on another group of commercial fishermen. Investigators were introduced to 2 men who claimed to make a living fishing illegally on Table Rock Lake. They bragged of being able to fill any order for game fish found in the lake. Their business was primarily one for flesh, but they were eager to enter the caviar business, having access to large numbers of paddlefish. As one-half of the team put it, "We will satisfy your need for eggs." When the investigator explained that his need was unlimited, the response was, "So is our ability to catch them."

Investigators paid \$26/kg to the crew fishing Table Rock, processed the eggs, and delivered them to the Tennessee buyers, explaining that the eggs were taken by the investigators. With the addition of the new suppliers, investigators were able to acquire large amounts of eggs without having to operate illegally on their own. In addition, they were able to buy the eggs for \$26/kg, and sell them for \$55/kg, while citing violations on both ends of the operation.

The decision to close the investigation was based on several factors. Violations had been noted of essentially every target of the operation. Suspicion as to the identity of the investigators was growing, adding safety considerations into the decision. It was early April and the peak of spring migration was approaching, meaning more slaughter of perhaps thousands of paddlefish.

Investigators remained in contact with the suspects until the end in order to update information for search and arrest warrants. The take down went smoothly with 7 defendants arrested at that time. Boats, nets, depth finders, and egg processing equipment were all seized. In addition, air bills were recovered indicating dates of egg shipments and to whom they were shipped. Receipts indicated most eggs were shipped to International Caviar of New York.

A total of 25 defendants pled guilty in both state and federal court to charges stemming from both uniformed officer arrests and the covert investigation. While most were minor operators and received fines and suspended jail sentences, the major targets were treated sternly.

Both egg buyers received 21 months in prison in addition to substantial fines. Associates received from 3 to 6 months in prison and fines as well. Many individuals were ordered to pay restitution to the state, including 3 Oklahoma commercial fishermen convicted on charges as a result of an all-night surveillance by uniformed conservation agents on Table Rock Lake. They paid \$11,000 restitution and lost sport and commercial fishing privileges for various amounts of time.

Fisheries biologists do not expect an overnight cure for Missouri's paddlefish resource. It will take several years to recover without the presence of egg poachers, and only time will tell if the illegal operation has been halted.

It should be noted that the investigation would not have been possible without the dedicated work of uniformed Missouri conservation agents in the Southwest and West Central regions, Oklahoma Game Ranger Dennis Maxwell, U.S. Fish and Wildlife Service agents, and Federal Prosecutor David Detar Newbert. The investigation was coordinated and supervised by Missouri Conservation Department Chief of Protection Bob King, Assistant Chief and Special Investigation Supervisor Ron Glover, and U.S. Fish and Wildlife Service Supervisor Larry Keck.