# The Use of the Special Response Dive Team in Aquatic Law Enforcement

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*Abstract:* Law enforcement special response dive teams have been utilized for many reasons in the past such as body recovery, underwater investigations, and evidence recovery. Arkansas's Search and Recovery Dive Team has increased emphasis on the sport of spearfishing in large impoundments of water in response to expansion of the sport's popularity, survey results, violations, and sportsmen contacts. Complaints consisted of taking fish species protected by slot limits, spearfishing activities before season, wasting wildlife (leaving illegally taken fish on the bottom), taking over the legal limit, and spearfishing beyond the legal distance from a dive flag. Past enforcement efforts have been limited to the use of conventional boating patrols and long hours of surveillance, but these efforts are time consuming and labor intensive for the number of sportsmen contacted. The use of the Search and Recovery Dive Team places the officers in the water with the possible violator to inspect and observe the diving activities.

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Spearfishing in Arkansas is a rapidly growing sport with an increasing number of people becoming involved each year. The Arkansas Game and Fish Commission does not regulate sport diving; however, it does regulate spearfishing. Spearfishing is growing in popularity within Arkansas in part because it is the only state that allows fresh water spearfishing for game fish. In a 3-year creel survey conducted by Arkansas Game and Fish biologists, respondents indicated that between September 1994 and August 1997 on Lake Ouachita they had spearfished for 7,548 angler hours; 76% of this was done during the summer months (Wooldridge and Hobbs 1997).

The increase of popularity of spearfishing has also created an increase in the number of violators. Routine type enforcement efforts have limited officers to enforcement of license requirements, over limits, and occasional protected slot limit

violations. The Arkansas Dive Team; using new techniques, was able to find spearfishermen with their fish before they could discard them on the bottom. We also found that many violators will tie illegal fish to anchor ropes and minnow baskets before coming to the surface.

## The Arkansas Search and Recovery Dive Team

The Arkansas Game and Fish Commission Search and Recovery Dive Team was formed in fall 1997. The Arkansas Dive Team consists of 5 full-time wildlife law enforcement officers, one of whom also serves as the dive coordinator. Training is as follows: open water, advanced open water, rescue diver, and master diver certifications. Two team members are also emergency medical technicians with ambulance certification and the remaining 3 members are first responder certified. All members are certified in DAN Oxygen delivery and for treatment of dive-related accidents. In addition to the dive certification, each member has completed an extensive training course in advanced personal watercraft rescue. The training listed above is in addition to mandatory job duties (761-hour, 16-week officer school, in-service, instructor, and other specialized training).

The dive team members are identically equipped for uniformity. The wet suits are black 5 mm and have high visibility yellow sleeves, with Wildlife Officer in bold black letters down one sleeve and S & R Team down the other. The tanks, fins, and masks are the same high visibility yellow.

The mission of the Arkansas Search and Recovery Dive Team is to provide underwater search and recovery operations to collect evidence for all law enforcement agencies, investigate boating accidents, and body recovery with a state wide response area.

## Arkansas Fishing Regulations

In Arkansas, spearfishing season for game fish is open from 15 June until 15 March, sunrise to sunset, in lakes Beaver, Blue Mountain, Bull Shoals, Catherine, Conway, Degray, Erling, Greers Ferry, Greeson, Hamilton, Harris Brake, Millwood, Nimrod, Norfork, Ouachita, Table Rock, and impoundments created by the locks and dams on the Arkansas River.

Spearfishing for smallmouth is not permitted on Lake Ouachita. Spearfishing for largemouth, spotted or smallmouth basses is not allowed on lakes Beaver, Bull Shoals, Millwood, Norfork, and Table Rock. Spearfishing season for flathead catfish is open from 15 July until 15 March. Buffalo, carp, suckers, or drum may be taken by spearfishing all year on any waters mentioned above.

Only catfish and rough fish may be taken from 15 June until 15 March, sunrise to sunset, on Gillham, Dierks, and DeQueen lakes. On these lakes flathead catfish can be taken from 15 July until 15 March.

When spearfishing, spearfishermen are limited to one-half of the game fish daily limit (or the lesser number nearest one-half when the limit is an odd number).

Spearfishermen must also abide by length and slot limits. Spearfishermen may not have a speargun in public waters other than those specified above. In addition, spearfishermen must display a standard diver's flag and may not spearfish more than 300 feet from it. They may not clean or dress fish before they can finish spearfishing and leaving the body of water.

## Purpose of Operation

In the spring of 1998, Enforcement District A-3 officers in west central Arkansas decided to try to enhance spearfishing enforcement techniques by utilizing the dive team. With this type of enforcement technique, Arkansas officers could put dive team members into the water to check for possible violations that were escaping routing efforts.

## Location of Operation

All 3 dive team operations were conducted on Lake Ouachita in west central Arkansas. Lake Ouachita is a U.S. Corps of Engineers impoundment consisting of approximately 48,300 acres with over 200 islands, running 39 miles in length with 989 miles of shoreline. Lake Ouachita is a wilderness lake; camping is allowed on islands. Spearfishermen can take their harvested fish to their own campsites, without being checked at one of the many public access areas because of the lake's wilderness status. Lake Ouachita was ranked number one in 1997 for water clarity in the United States and remains in the top 5 in 1998. Ouachita is one of the largest recreational lakes in Arkansas, drawing thousands of tourists from other states throughout the summer. The underwater visibility of Lake Ouachita ranges from 8 to 10 feet on poor days and up to 20 feet on exceptional days.

## Methods

The first step in the initial operation was an introductory briefing. During this time, officers and administrators discuss aircraft flight patterns and locations of the officers and dive team members on and in the water. The initial operation consisted of 2 boats with an officer and 2 dive team members in each boat, 1 fixed wing aircraft, and a spotter in the aircraft that was familiar with Lake Ouachita. The lake was divided into 2 sections with 1 boat in each section to be directed by personnel in the aircraft using the radio and Global Positioning Systems (GPS) in both the aircraft and boats. The first operation was a trial run to determine whether technique changes or modifications would be needed and to assess the effectiveness of the procedure to see if the operation would be beneficial to our enforcement efforts. Our initial operation consisted of 2 hours of flight time. With only 2 hours of flight time, the aircraft was too far ahead for the support officers, and officers had to cover too much area in too short a time. The target date was the weekend prior to the opening day of spearfishing season. All officers were instructed to stay focused on the initial assignment, but

not overlook flagrant boating and sportfishing law violations. The second operation consisted of the same procedures as the first with the exception of flight time, which was expanded to 5 hours. It was determined 2 hours of flight time was not adequate enough to perform the operation. The third operation consisted of 3 boats, 1 boat carrying 3 dive team members, and 2 boats with 2 non-diving wildlife officers per boat. These officers responded to spearfishermen locations to determine if the dive team members should enter the water. This operation consisted of 5 hours of flight time.

The fixed wing aircraft flew at altitudes that allowed the spotter in the aircraft to locate dive flags and air bubbles from divers in the water. The altitudes varied due to mountainous terrain surrounding Lake Ouachita, if the spotter needed a closer look, or if the aircraft needed to be less conspicuous. The objective of the spotter was to spot and count the number of divers in the water by the bubble patterns on the surface and, in best case scenarios, identify the divers in possession of spearfishing equipment. The plan provided for the aircraft to locate divers in the water and assign each boat to these areas until all officers were occupied, then land at a local airport to maximize flight time. The five hours of flight time was actually a 10-hour workday. The aircraft should follow preset flight paths, locate divers and/or air bubbles, and send in the closest team to determine if divers were in the water or already on the surface or in a boat. If divers were already on the surface and in possession of spearfishing equipment, it was that officer's responsibility to check for license and fish. If divers were still in the water, the officers would then contact dive team members (at least 2 dive team members per situation), to initiate the underwater investigation. The dive team then swam over the air bubbles and descended, positioning themselves approximately 5 feet above the spearfishermen in question. Dive team members watched and observed the spearfishermen's activities. Once dive team members were able to determine if and how many divers were spearfishing, a check was initiated. Officers determined that the most effective way to approach was from above and behind, tapping the spearfishermen's air tanks. Safety was a fundamental consideration, knowing that spearfishermen have spearguns and in most cases, officers will startle the spearfishermen. To be as safe as possible, dive team members held on to the spearfishermen's air delivery valve to maintain control of spearfishermen while tapping on their air tank. Spearfishermen checked did not have any idea that an S&R team member was in the water with them until dive team members pointed to the sleeve marked Wildlife Officer. Dive team members then instructed spearfishermen by directions written in large bold letter on and underwater slate: "CHECKING FISH" and "HOW MANY DIVERS ARE WITH YOU." Dive team members then determined how many and what species of fish spearfishermen had in their possession. The next step was to ascend to the surface to check license and lengths of species if applicable. A third officer was required at the dive scene to watch both the dive teams and the spearfishermen's boat. In some cases it was observed that spearfishermen kept a lookout person in the boat, and it was important for officers to remember that all occupants in the boats may not be spearfishermen or lookouts.

## Spotter's Analysis

A different spotter was used for each operation. Fairly good weather conditions with good visibility into the water from the aircraft was present for the first operation. The use of a repeater for communication between aircraft and boat was not advantageous because of interference picking up the aircraft engine noise and because the simplex frequency was much clearer. Dive team members checked a total of 8 boats in the 2 hours of flight time.

The second operation was expanded to the 5 hours of flight time, but high winds and choppy waters made air bubbles more difficult to locate. The simplex channel worked much more efficiently, radio traffic was clearer and less congested than the repeater channel, making response time quicker to the spearfishermen diver sites. During the second operation, the spotter made visual contact with 18 spearfishermen's boats, and all were checked by the dive team.

The third operation was conducted under good weather conditions and good water visibility. The spotter spotted the spearfishermen in the water, advised how many spearfishermen were in the water, and identified the color of the air tanks. The spotter was able to provide the dive team members with the exact location of air bubbles and landmarks in relation to the position of the dive team boat. Dive team members check 22 different spearfishermen boats during the third operation. This spotter stated that he spotted at least twice that number of boats with dive equipment in them but not diving at the time.

The 3 different spotters observed at least double the number of spearfishermen from the aircraft than dive team members and officers would have seen with conventional boat patrols. Also, none of the spotters sent the dive team members to large groups of divers that would have been considered a possible dive class.

## Operational Set-Up

The aircraft and the dive team proved to be essential tools to enhance enforcement efforts in this area. A total of 7 officers, including the spotter, were utilized for the first and second operations, and expanded to 8 officers for the third operation. The only expense above normal operating expenses was the aircraft. Communications between aircraft and boats was very critical to the success of the operation. Two ground-based repeaters and 1 simplex frequency were used to communicate. It was important that the spotter kept in constant contact with all water-based units and continually advised the aircraft's location so that these water-based units could move with the aircraft. Target dates selected were of the utmost importance. Depending on each agency's different needs, the types of regulations that are to be enforced, and based on complaints filed, those dates may vary considerably. Officers observed that target dates of operations just prior to and just after the opening of spearfishing season experienced greater success. Past enforcement efforts have shown high activity during targeted dates. Secondly, administrators needed to determine how many officers were going to be needed to cover the area involved, in addition to spotters for the

aircraft. An experienced spotter was critical to the success of an operation. A spotter must have knowledge of the lake and landmarks and an ability to maintain constant communication of the aircraft's location in relation to officers in boats. Spotters must not take for granted that the dive team members or other officers working the operation have an exact location of the aircraft just because spotters might see their boats. Next, administrators must determine the type of aircraft that is best suited for the operation. The original plan specified a helicopter, but it was cost prohibitive. The fixed wing aircraft utilized cost around 4100 per flight hour versus $500 per flight hour for a helicopter. Once the operation had begun, dive team members needed to be suited up and ready to dive immediately upon arrival at a dive site. These divers must also have their plan of action worked out following protocol to make the investigative dive. Officers found that it was easier for the boat operator to take any notes necessary for each dive team member's log (dive time, temperature, tank pressures, etc.) Officers also found that dive computers were a must for success of the operations.

## Overall Analysis

The 3 operations were considered a great success for both enforcement and public relations. Several sportsmen contacts were also made, including hook and line sportsmen and spearfishermen. In this region of Arkansas, an ongoing conflict between these 2 different types of sportsmen group exists. The bass anglers do not agree with spearfishermen being allowed to harvest bass because they feel that spearfishermen have an advantage over the standard hook and line method. The spearfishermen contend that they have been mistreated because more stringent limit regulations are imposed, allowing them to harvest only half of the daily limit allowed of the hook and line anglers. Spearfishermen feel that their investment of equipment is equal between the 2 types of angling. After the 3 operations during June 1998, numerous comments were received from both groups. The hook and line anglers were glad that enforcement efforts on spearfishing were increased, thus insuring that spearfishermen were not taking over limits or protected slot fish. The spearfishermen were also enthusiastic about the new enforcement techniques. The spearfishermen and other sportsmen understand that a few give the rest a bad name and spearfishermen want to see their sport protected and preserved for future enjoyment. Local dive shop owners received primarily positive comments; however, some negative comments were received. Some spearfishermen suggested that they were singled out during the operation. This complaint was unfounded, as spotters were able to direct dive team members to all spearfishermen present during the operation.

Ability to identify spearfishermen and check for possible violators was the important issue, not the number of citations issued. The aircraft and boat allowed for complete coverage of the lake and the large number of spearfishermen to be checked. The operations were also successful based on high positive public comment, officer confidence in quality enforcement, and improved compliance. As with all enforcement efforts, the goal is not to write as many citations as possible but to bring the violators into compliance with law enforcement presence.

In the past, spearfishermen in this area of Arkansas were aware that officers were limited to identifying violators from the surface. The new enforcement technique of air and boat checking with the dive team will take some sport divers time to accept and become familiar with. Spearfishermen are no longer alone in the water and hidden from law enforcement with this new and innovative enforcement technique. The participating officers and dive team members are certain from a single year's results that air, boat and dive team operations will become a routine part of future enforcement efforts for Arkansas lakes that are open to spearfishing.

## Literature Cited

Wooldridge, S. J. and T. B. Hobbs. 1997. Lake Ouachita Creel Survey, 1994 through 1997. Arkansas Game and Fish Comm., Little Rock. 4pp.