teristics that existed during the property's historic period." The various preserves were established because of existing historical and recreational value—a recognition of the unique circumstances in the past which brought ships of many ages and types to grief in a limited area. Salting is unacceptable in that it upsets the balance between historic preservation and recreational interests that now exists. It establishes a bad precedent that could lead to requests for placement of more and even less acceptable objects—why not an airliner or car ferry?

But these latter comments should not be taken in any way to detract from the overall success of the preserves. They have proved attractive foci to divers from Michigan and from surrounding states. They have also proved to be significant economic assets to the communities located adjacent to them. An analysis by the Alger Underwater Preserve Committee suggests that in 1982, 4000 divers spent \$600,000 in Alger County with divers spending over \$30 more per day than the average tourist. Local support groups have attracted outside funding for their activities. For example, the Alger Underwater Preserve Committee has received a grant from the Yes MIch!gan campaign in the amount of \$6,700. Two documents describing preserve programs will be published with DNR's assistance; an 18" × 20" poster and a pamphlet.

The Huron County Ad Hoc Underwater Preserve Committee is headed by the county's agriculture extension agent and has as members two county commissioners, a township supervisor, three charter boat operators, two sport divers, the county sheriff department's diver, the county's building and zoning inspector, the director of the county's economic development corporation, the local Sea Grant agent, the head of the county road commission's park division, the head of the county historical society, a marina owner and two restaurant/motel owners. There has been literally no opposition to the preserve in Huron County (is there anyone who isn't on the committee?), which clearly shows how

ALAN B. ALBRIGHT

Take the Cash and Let the Credit Go

In managing a resource with less than adequate support, one is forced to establish priorities. Although these priorities often represent unpalatable compromises, they do reflect the resource manager's evaluation of the real-life situation and how to realistically cope with it. Extremism, represented by the "I am right and you are wrong" philosophy (especially if exercised by a person in an authoritative position) is unreasonable and in the long run self defeating. Consider what has happened in Florida over the past few years.

The ethics of archaeologically approved resource management cannot be forced upon the sport diving community. But, through a program that involves compromise, cooperation, and education, these two otherwise disparate groups can be brought together in a trusting and mutually beneficial association.

For the resource manager, this means a committment to long range goals, keeping lines of communication open, and a willingness to accept defeat in some areas gracefully. Idealism, important the preserve is to locals. In addition, they have also submitted an application to the State Historic Preservation Officer for funds to begin a comprehensive inventory of the proposed preserve.

Best of all, the creation of preserves has engendered a high degree of local protectiveness. After all, now people are beginning to stake their livelihoods on the continued existence of shipwrecks and salvors who would degrade them do not go unseen or unreported. The non-renewable resources historic preservationists are so fond of talking about have become economic resources that must be reckoned with in areas seeking to enhance their tourist appeal and drawing power. Divers from Chicago who may never have heard of Harbor Beach or Port Austin may now be spending several days there eating at Dufty's Restaurant, sleeping at Gottschalk's Motel, picking up a new regulator at Heins's Hardware, chartering Davis's boat and maybe even visiting Richards's museum.

In sum, those of us responsible for the preservation of the Great Lakes maritime heritage lying on Michigan's bottomlands have invited the public to take an active role in its discovery, interpretation and management. Little in the way of actual archaeology is proposed: practitioners and financial support are just not there. Instead, we believe that greater public knowledge of the importance of the resources present in existing preserves, the real nature of the preserves, the creation of new preserves, the realization that these are public resources and the exhibition/publication of the results of Ken Pott's South Haven project will keep us on the right course and off the reefs. Given the nature and number of resource managers available, we would appear to have no other choices.

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which states what should be, is for the classroom. Realism, which reflects an acceptance of what is, is for the real world.

Working with amateurs in the management of a state's underwater archaeological resources is a concept, which, if used intelligently within the framework of practical considerations, ethical requirements, and long-range goals, can pay dividends far in excess of the money, time, and energy expended. When I accepted the position as Underwater Archaeologist on the staff of the Institute of Archaeology and Anthropology of the University of South Carolina in July 1973, I was given the responsibility of discovering, assessing and managing the State's underwater archaeological resources using as a guideline a law that had been on the books for six years but almost totally ignored by the sport diving community. The law was written by a lawyer, on behalf of himself, a shrimp boat captain, and a sport diver. Their purpose was to gain legal protection over a Civil War blockade runner they had recently discovered and wished to excavate. What they began, in writing this law, has evolved over the years into a set of practical guidelines for both the State and its citizens to follow in managing South Carolina's underwater archaeological resources

In order for a resource management law to accomplish the aim

for which it was written, it is first necessary to establish a philosophy which is compatible with the State's long-range goals. This philosophy becomes the underlying guide in the management of the resources through the law. I use the word philosophy very broadly to encompass such concepts as premises, attitudes and other principles that give thrust, meaning and direction to the law. In the 10 years that I have been involved in resource management. I have become convinced that the philosophy behind the administration of the law is the bedrock on which the law itself should be developed.

I will first suggest a philosophy of working with amateurs that can be adapted to particular requirements and be reflected in law. It is a philosophy that stresses education over law enforcement. cooperation over confrontation and has as a goal the acceptance of responsibility by the sport divers for a major share of the management of their own underwater archaeological resources. This is accomplished by working within the law under the direction of the state. The premises which follow, when taken together, form a philosophical statement of intent and direction in resource management from which a law can be developed.

Premises

People are basically good and tend to obey the law. Successful societies are built on laws. The news media constantly bring to our attention the results of personal, national, and international lawlessness but seldom give equal coverage to the daily, ordinary, and routinely expected acts of civil obedience that surround us. Most of us will live out our lives with only a few serious encounters with lawlessness. The preponderance of personal activities is non-destructive and within the law.

Cooperation is more effective than confrontation and threats of law enforcement. Cooperation is more effective, economical, and gets the job done better. For the resource manager it is also less taxing mentally, physically and emotionally in dealing with the sport diver to move toward a mutually acceptable goal than to demand compliance through threats of law enforcement. Unfortunately, law enforcement is sometimes necessary. There are always some on whom the message is lost or who choose to ignore and flaunt the law

Ethnics cannot successfully be imposed on others. This was probably best demonstrated in the 1920s by the rapid proliferation of the illegal speakeasy and bootlegging; the common man's response to the ethical and moral dictates of others. The ethics of one group cannot, through legislation alone, be successfully imposed on another group. The ethical concepts that are an integral part of the education and background of a professional archaeologist generally run contrary to the desires and goals of the amateur collector who perceives his avocation of artifact collecting threatened by unreasonable bureaucrats. Ethics is one of the main issues that separate the archaeologist who is generally the resource manager, and the non-archaeological amateur. It is, however, the latter who historically has been responsible for the major underwater archaeological discoveries both numerically and in significance. It was amateurs who discovered such preeminently significant vessels as the Wasa, Mary Rose, Philadelphia, and Brown's Ferry vessel. The archaeologist's position that he should be the sole arbiter of issues pertaining to that body of knowledge of which he has special insight through education, training, and experience is valid, and

in the long run must prevail. The amateur, on the other hand, through whose dogged perseverance, special expertise, and hard work this resource is discovered, should participate in its management. These two opposing viewpoints do not have to remain unreconcilable. They can be brought together, but the responsibility for this rests with the archaeologist. He must take action through an educational process to demonstrate to the amateur that the best interests of all are served by a cooperative effort under professional guidance, and this can be done.

Education is the key to understanding, and understanding is the foundation of conservation. It is readily obvious that the more I meet with individuals and sport diving groups the more cooperation I receive from them. These meetings generally include a slide talk on artifact identification and history, identification of artifacts they have found, a discussion of the law, and the importance of conserving the state's non-renewable archaeological resources. With the realization of the importance of conservation comes acceptance, compliance, and eventual support of the law

It is sometimes necessary to accept a short-range loss in order to make a long-range gain. Advancements in the physical and social sciences do not always progress along a straight path. In resource management it is often necessary to make difficult compromises. For example, information derived from the sport diver is usually more valuable to our long range goals in our quest for knowledge than their surface collecting is harmful to the

People generally want to become involved. Without exception, on every underwater project that the Institute has carried out in public view, both sport divers and support personnel have volunteered their services and under proper supervision have provided valuable assistance.

Support and opposition are identical emotional responses, travelling parallel paths only a step apart. In dealing with the sport diving community I have found that the most vociferous opponents of the law regulating their activities eventually become, through time and education, the strongest supporters of our conservation efforts.

People want and need approval. Psychologists call it stroking-the act of giving approval and support. A State official that shows appreciation to a sport diver who is acting within the law binds him to the law with a moral force far greater than the occasion might normally warrant.

The views of the sport diver should be acknowledged and respected even though they generally run contrary to the ethics and values of the archaeologist.

This premise is closely linked to the ethics statements made earlier. Disparate groups cannot resolve their difference without an acknowledgement by both parties of the right of differing viewpoints. With this right acknowledged they can begin communicating and resolving their differences as equals.

Practical Considerations. The South Carolina program provides the vehicle for the blending of amateur participation under professional guidance in the management of its underwater archaeological resource. The law provides for the licensing of sport divers to recover artifacts but requires them to make a written report of their activities to the Institute on a monthly basis. The licensing of sport divers to recover artifacts by the State is a very controversial issue within the ranks of the professional underwater archaeological community, most viewing it as the antithesis of ethical archaeological resource manage-

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ment. From an academic viewpoint they may be right, but very little of the world we live in is structured along academic lines.

The practical elements of the situation I encountered in 1973 were not those that lend themselves to an academic solution. I discovered that several hundred sport divers were recovering artifacts and fossils on a regular basis from the 12,000 plus linear miles of creeks and rivers of the State. The quality and quantity of artifacts and fossils recovered suggested that on and under the bottoms of the rivers lay a vast repository of information in the form of sunken vessels, artifacts and fossils from the state's historic, prehistoric, and paleontological past. Fossils are included in our management plan because in our river system all underwater archaeological sites have yielded fossils and all fossil beds have an archaeological component.

Utilizing the numbers, energy, expertise and local knowledge of the sport divers was the most practical and reasonable approach to take for a one-man operation with wide responsibilities and very limited resources. Even if I had the capability through law enforcement to compel compliance with the law, I would have chosen the voluntary compliance route as the one most likely to be successful over time.

The program developed in South Carolina for the management of its underwater archaeological resources might serve as a guide for consideration by other authorities but should not be adopted verbatim. The program that has evolved in South Carolina over the past 10 years reflects the special needs of a small southeastern state with its particular physical, human and cultural environment that has little in common with the special needs of other states with their own particular physical, human and cultural environment. The law, which is actually the resource management plan, is written for the special conditions of a specific environment and, except in unusual cases, is not transferable from one area to another. The philosophy behind the administration of the law, that element that gives it vitality, is transferable. It is not tied to a physical environment; rather it addresses the social aspect of resource management, that part dealing with people.

The Law and Its Application

The authority for the management of South Carolina's underwater archaeological resources rests by state law with Dr. Robert L. Stephenson, Director of the Institute of Archaeology and Anthropology of the University of South Carolina. The day-today management responsibilities, however, rest with me as Director of the Institute's Division of Underwater Archaeology. I mention resources rather than just shipwrecks because, although shipwrecks are a very visible, media-attractive, and attentiongetting part of the underwater archaeological resources, they are only one part of the whole. Prehistoric man and his water-related activities deserve attention and investigation as well as the water-related activities of historic man. The management plan that covers one logically should also cover the other.

South Carolina, like many states in the nation with navigable rivers, harbors, ocean coastlines or large lakes, faces the problem of how to properly manage the resources that lie on the bottom in a manner to achieve maximum acceptable protection to the resources with minimum cost to the state. It is easy to say that state governments have a responsibility to find the money for adequate management, but the realities of budget limitations often dictate otherwise. There are a number of ways to handle this

problem. One is to deny its existence and let the free enterprise system take control, excavate a site for private gain, sell and scatter the unrecorded artifacts to parts unknown, and otherwise despoil an important segment of our history. The other end of the spectrum is to pass restrictive laws, authorize and fund a large law enforcement establishment, and then spend a great deal of time and money in law enforcement and defending the system in court. In South Carolina, we have chosen a middle course which we believe affords reasonable protection to the resource, involves those affected by the law in its application, and is cost effective.

South Carolina is one of only 20 or so states that has a law pertaining to the management of its underwater archaeological resources. It is one of only four or five states with a state program of underwater archaeological investigation and resource management, and is the only state to my knowledge, to have a program of resource management that has the general support of the sport diving community. The vehicle through which this is carried out is the "South Carolina Underwater Antiquities Act of 1982." The law, in its several versions, has been in effect since 1968. It was then called "Control of Certain Salvage Operations." The change in title emphasis from "salvage" in 1968 to "antiquities" in 1982 reflects the growth and development of underwater archaeology in South Carolina since its inception 15 years ago.

The law does several things; it establishes, assigns, authorizes, and provides, as follows: (1) It establishes title to the river bottoms and ocean bottom out to the three-mile limit and title to "all objects of archaeological and paleontological association which have remained unclaimed for more than 50 years." (2) It assigns responsibility for the management of this artifact and fossil resource to the Institute, although the curation of the fossils is the responsibility of the South Carolina Museum Commission. (3) It authorizes the Institute to conduct underwater archaeological projects and to license others to do the same if it is clearly "in the best interests of the state," said licensee to be guaranteed no less than 50% of the artifacts recovered, "in value or in kind." (4) It provides for law enforcement, license revocation, and judicial recourse for the diver and for the State.

The law authorizes the issuance of three types of licenses: Hobby Licenses, Search Licenses, and Salvage Licenses. These licenses are not diving licenses; they are instead licenses authorizing a person to go onto state property, the river and ocean bottom, and to search for and recover state property, the fossils and artifacts. Each license is for a specific activity and has its own responsibilities and requirements.

First, the Hobby License. This license is issued to a sport diver for "temporary, intermittent, noncommercial search and salvage operations of a recreational nature requiring minimal equipment, training, and experience." The license is statewide in authority except in the few restricted areas where Search and Salvage Licenses may be in force or where the Institute may have placed off limits for its own research purposes. The Hobby Diver is required to report his licensed activities on a monthly basis detailing what was found, where, when, and by whom, on forms provided by the Institute. These reports are confidential, are not open to inspection by other Hobby Divers and are a major source of site locations for the Statewide Inventory of Archaeological Sites.

The state has 60 days from receipt of the report to exercise its option on a division of artifacts. If no division is made within 60 days, title goes to the licensed diver. The fee is \$5.00 per person or husband and wife, and \$25.00 for instructors for use in classes

in which the recovery of artifacts or fossils is an integral part of the instruction. Fees for out-of-state applicants are double the instate fees. The license is good for one year from date of issue. The hobby licensed diver may not use any powered mechanical lifting or excavating devices or remote sensing devices (such as metal detectors) under this license. This is a hands only license. Offenses arising out of this license category are heard in a local magistrate's court with a maximum fine of \$200 or a jail sentence not to exceed 30 days.

A Search License may be granted to an applicant for the purpose of conducting underwater search operations using electronic remote sensing systems, ranging systems, or other sophisticated methods of search. It is granted for a period of three months, for an area of one square mile in open bodies of water, or one linear mile in a river. The three-month time period and one square or linear mile area is called a search unit. Nine search units are the maximum that may be issued under this license to any one applicant. The fee for each search unit is \$25.00 for instate residents and double that for out-of-state residents. Only the number of artifacts needed for evaluation of the site may be removed under this license. A written report is required at a frequency specified in the license. A division of artifacts is always made, and the operation is monitored by Institute personnel. The same 60-day option for final ownership of artifacts as in the Hobby License is authorized. Offenses arising out of this license category are heard in circuit court and upon conviction are punishable by a fine not to exceed \$10,000 or imprisonment not to exceed two years.

A Salvage License "may be granted to an applicant for the purpose of conducting a well planned, continuing, underwater salvage operation with experienced personnel and adequate financial support." The Salvage License is issued for a specific site and is granted for a period of time not to exceed one year. A fee of \$250 is charged. Detailed reports of all activities covered under the license are required, including a listing of all personnel and equipment used under the license. Powered lifting and excavating devices are permitted, provided they are used in accordance with a plan of operation previously approved by the Institute. A written report is required at a frequency specified in the license. Work under this license is monitored by Institute personnel. Offenses in this license category are handled in the same way as for a Search License.

The law was written in specific terms where precise statements had to be made, but in less specific terms where discretionary powers might be desired. For example, the law guarantees to the licensee equity of not less than 50% of the artifacts, "in value or in kind." If it is decided by the Institute that an artifact, or collection of artifacts recovered under a license should remain intact and in state hands, the licensee is compensated "in value" for his share. It is the responsibility of the Institute to find the funds to compensate the diver. The compensation figure is determined in the following manner. An appraiser representing the diver and an appraiser representing the state choose a third appraiser. The three set the value, which is binding on both parties. This has not happened in the 16 years the law has been in effect but the provision is there if the need arises.

In another example of discretionary powers, the law guarantees to the licensee equity of not less than 50% but does not prohibit the Institute from granting more than 50% equity, which it often does. For example, the percentage equity printed on the Hobby License form is stated as 75% for the diver and 25% for the state, and in fact the Institute has never made a division with a Hobby Diver of his finds. Because of this non-possessive attitude, the Institute has never been denied the long term loan of an artifact for study or display. In contrast with not requiring a division with a Hobby Diver, the Institute always requires a division with a Search or Salvage Licensee and the salvor's equity in the license seldom exceeds 50%.

There are two crucial provisions in the law that give major discretionary powers to the Institute in the granting or denial of licenses. The first authorizes the granting of a license only "as the Institute may deem to be in the best interests of the State." The second provision states that "No license for the disturbance or removal of any submerged antiquities which, in the opinion of the Institute, are of primary scientific value shall be granted." Under South Carolina law, therefore, none of the many treasure salvors that have had salvage licenses in other states could operate in South Carolina, because the Institute considers treasure vessels and all vessels sunk in the 18th century or before to be of primary scientific value. The decision of what constitutes primary scientific value is made by Institute archaeologists, not by politicians or special interest groups. Licenses for salvors desiring to work on vessels lost in the 19th and 20th centuries are handled on a case-by-case basis. A recognized underwater archaeologist wishing to excavate a shipwreck of primary scientific value could not do so under the licensing system. He would instead be appointed an adjunct member of the Institute staff for the duration of the project. The Institute's facilities and equipment would be made available to him if needed.

In order for this law to be made into a workable tool for resource management, it was necessary to make some hard decisions. It was decided that using the law as a club to bludgeon compliance would be immediately counterproductive and firmly establish an adversary relationship between the diver and the Institute. Aside from the fact that the Institute could not fund an adequate law enforcement effort it was believed that if we could open up a line of communication with the divers, present the case for conservation with conviction but not from a position of unassailable power, stressing long range benefits of an educational and scientific nature for the citizens of the state, the divers would respond in a positive manner. And such was the case, but it did not happen overnight.

I sought a close association with the divers and spent many hours in countless dive club meetings and with individuals discussing each other's special concerns. Their opinions were sought and listened to; ours were received and considered. We were open with each other and held nothing back, particularly when we had a controversial point to make or positions to defend. In other words, we opened lines of communication, conducted ourselves with courtesy and respect, recognized each other's value and potential contribution, and eventually developed a trust that made mutual cooperation inevitable.

There are a number of qualities about South Carolina that have created a physical environment in which our program has been able to take root and grow. Probably most important, at least to date, is the complete absence of known or sought-after treasure wrecks in state waters. For this we are thankful. South Carolina is a small state but has a relatively large number of rivers for its size. These fresh water rivers, where most of the diving takes place and most of the discoveries are made, are beneficial to our conservation efforts because they inhibit two major destructive forces to shipwrecks and artifacts: teredos and electrolysis.

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Organic and inorganic material from river sites tends to be in better condition than comparable material recovered from sea water. Most of the rivers are wide, some are quite deep, and except for the Cooper River, have a high tannin or particulate matter content which limits visibility severely. The Cooper River alone in the state often has 15-foot visibility. Out to the three mile limit in the ocean, visibility is almost always very poor.

The generally poor visibility tends to quickly eliminate the dilettante divers; those who perservere do so with a singleness of purpose. This personality type initially tends to oppose regulation but upon learning how the law is applied and why, usually becomes supportive. The small size of the state also works in our favor because it is possible to drive from the Institute in Columbia to the furthest part of the state to visit a site or meet with a diver in less than three hours, and to the center of diving activity around Charleston in only two hours.

Results

I do not want to imply that our management techniques have resulted in 100% compliance by the sport diving community, for that is not the case. A number of divers from both in and out of state ignore the law altogether, and take the chance that they will not encounter a law officer while diving. They have not always been successful and arrests have been made. We are also aware that some divers do not list all of their recoveries or sites on the monthly report forms they send to the Institute. Some report to us only objects they have no interest in, or which are not saleable. keeping the saleable objects for themselves. This has happened, and will undoubtedly continue to happen, but I believe at an increasingly lower rate as time progresses. Certain divers have tried to circumvent the Institute's licensing authority by working within the state political system or through other agencies such as museums, but in this they have not been successful. We have revoked licenses for cause, and have had our revocation challenged in court. To date, however, all of our legal actions have been upheld or the challenges have been thrown out of court before reaching trial stage.

In contrast to the negative response mentioned above, the positive side of the program is encouraging. In 1976 a Hobby Diver discovered a shipwreck in the Black River in South Carolina at a site known as Brown's Ferry. He reported the discovery to the Institute and after a determination had been made that the vessel dated from around 1740 and was of primary significance to the study of early 18th century river craft, he voluntarily relinquished his equity in it and donated his share to the state. This would not have happened in an environment of confrontation. The vessel was raised by amateurs under professional direction and examined in detail. J. Richard Steffy of the Institute of Nautical Archaeology, probably the leading authority on ancient ship construction, said of the vessel: "In my opinion, it is the most important single nautical discovery in the United States to date. In the first place, it establishes abundant primary evidence for American shipbuilding nearly 50 years earlier than previous discoveries. More importantly, this was a merchant hull, built without the anxiety, bureaucracy, and inefficiency often associated with vessels of war. As such, it defines everyday technology in a competitive atmosphere. Additionally, this was a local type-important to any maritime scholar-representing a period and area in which far too little maritime information has been forthcoming."

Because of the cooperation of a single Hobby Diver in donating the vessel, I was able to raise \$300,000 for the construction of a conservation laboratory for the Brown's Ferry Vessel and other vessels yet to be recovered from South Carolina and other states. It is anticipated that the laboratory will be in use well into the next century. This laboratory, resulting from an act of civic responsibility by a sport diver, should put to rest the often heard statement that all sport divers are despoilers and looters of our heritage.

Hobby Divers have reported to the Institute the location in South Carolina rivers of at least six other sunken vessels of the 18th and early 19th centuries. These vessels may each be as significant to the study of the early maritime history of this nation as the Brown's Ferry vessel. To our knowledge, and to their credit, not a single vessel has been disturbed by a Hobby Diver nor has a diver entered a claim for any of the vessels since they were reported to the Institute. The few artifacts that were removed from one wreck, prior to our involvement, are available for examination on request.

Hobby divers and others knowing of our interests have reported to the Institute the location of over 20 dugout canoes, the majority of which were formed by fire and scraping in the pre-historic manner. At our request the divers have not disturbed them since their discovery and have expressed their desire to us that the canoes eventually be raised for examination, conservation, and display in a state or county museum.

A number of years ago a Hobby Diver recovered an intact example of a "Colono-Indian" jug. It was assumed that this plain, low fired, red earthenware jug had been made by Indians for sale to the colonists for use by slaves. However, an archaeologist from the Institute, examining the shape and impressed design, found exact duplicates being made and sold in Africa in this century. He further found in examining our site files that "Colono-Indian" ware had never been recovered, at least in South Carolina, from an Indian site and had always been recovered from a slave associated site. This has given a new direction for research on the interpretation of a type of ceramics found in relatively large numbers in the Southeast. Many scholars have examined our ceramic collection in order to find parallels in their collections that might be Indian-made in name but slave-made in fact.

Operating with a diving staff of only two, we are dependent on the voluntary support of Hobby Divers. On occasions too numerous to mention we have called upon divers for free help on one- or two-day projects and have seldom been turned down. On two occasions, a number of divers have given us, free of charge, their two-week annual vacation for the privilege of working on a project under Institute supervision. We have more volunteers than we have time or opportunity to use.

At present, there is only one salvage license in force for the excavation of a shipwreck. This license was issued to a sport diver from Florida who, while diving in South Carolina under a Hobby License, discovered the remains of the Federal transport U.S.S. Boston, lost in the Ashepoo River in 1864. The Boston had been hit by 75 to 80 cannon balls from a Confederate artillery battery. It caught fire, burned to the water line and sunk. After the war, it was salvaged under a Federal contract and undoubtedly picked over by generations of fishermen. The Institute did not consider this vessel to be of primary scientific value. The goal of the salvage operation was to recover the artifacts to sell, a concept

anathema to archaeologists but reasonable to the layman. Because this site has both federal and state components, both entities were involved with the licensing process. Therefore, a mutually agreeable understanding was reached by the three parties involved-federal, state and the private sector-with the Institute having overall management responsibilities. The salvor submitted a plan of operation which, after modification, was approved. He is conducting his operation in a scientific manner working within a five-foot grid system, recovering all objects, and carefully measuring major hull features. Artifacts are given a field catalogue number, recorded on Institute forms, and stored in separate containers at a nearby law enforcement complex. The required divisions are made, at appropriate times, to the proportions of 25% for the federal government, 25% for South Carolina, and 50% for the salvor. The licensee has conducted himself in a responsible manner, carried out Institute directions to the letter, and is a valuable asset to our program.

Other Amateur Support

Up to this point the only amateur I have mentioned has been the sport diver, who through the years, has played an active and vital role in all of our activities. There is another category of amateur who plays an equally vital but less visible role. This is a person or firm whose support is through the loan or gift of supplies and equipment. The recovery of the Brown's Ferry vessel would not have been possible without this kind of help. For instance, a garden supply store owner loaned us a pump and hose, and later a second pump; a fire department loaned us a hose nozzle; from the Air Force we borrowed lifting straps; from the National Guard an air compressor; a shoe store operator supplied sprinklers to keep the artifacts wet; a hardware store donated heavy rope; prisoners from the county jail moved bricks recovered from the wreck; from a Sears automotive center we borrowed heavy-duty batteries; from International Paper Company a 50-ton crane, and from a trucking company a 40 foot flatbed truck. All at no cost to the project. Engineers and welders from a nearby sawmill on their own time designed and built the large metal frame used to support

JOHN D. BROADWATER

Virginia's Underwater Archaeology Program: Projects and People

Last week, I heard a joke which pokes fun at Virginia's infamous conservatism: "How many Virginians does it take to change a light bulb?"... "Three—one to put in the new bulb and two to admire the old one!"

The joke reminded me of the dichotomy in Virginia's historic preservation program as a whole: Virginia's conservatism makes her very sympathetic to the concept of historic preservation but, at the same time, reluctant to spend money on such preservation.

I suspect that this dichotomy is not unique to Virginia. In fact, five years ago, Gordon Watts, who was at that time state underwater archaeologist for North Carolina, told me that the the vessel, and the paper company union supplied the crew for the crane. This was by any definition, a community project, supported by amateurs.

Another form of amateur support comes from an organization created a number of years ago called the South Carolina Underwater Archaeological Research Council. It is composed of an insurance agent with law enforcement, business, and political affiliations, a manufacturer and builder who worked on the Brown's Ferry project, a lawyer, and a publisher and media specialist who currently holds a Hobby License. The purpose of the council is to promote underwater archaeology in the state and to assist the Institute in any of its activities relating to the underwater program. Over the years it has developed funding sources but more importantly, it has provided me an entry into the business and political structure of the state I would not otherwise have.

Conclusion

The basic goal of the archaeologist is the acquisition of knowledge, not the collection of artifacts, although the two are inextricably entwined for a major part of the learning process. South Carolina's resource management program, utilizing the amateur in active and supportive roles, has already yielded major new information for the general body of archaeological knowledge and has the potential to make new contributions well into the future. In order for a law to be effective, it must be enforced or it must engender voluntary compliance. Although enforcement is occasionally necessary, it is always time consuming, expensive, it must be continually carried out, and it firmly establishes an adversary relationship as the norm. Voluntary compliance on the other hand, a product of education, understanding, and compromise, is less expensive, self-motivating and establishes cooperation as the norm. In South Carolina we have chosen the latter.

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secret to a continuing state effort in underwater archaeology may be projects, not programs, since it is often easier to find support for a project with short-term goals and needs. Virginia's program began with a similar philosophy, but as the program developed, it became clear that we rely on two elements: projects and people.

There was no formal underwater archaeology program in Virginia until 1978; however, Virginia's interest in her submerged cultural resources had been kindled in the early 1930s, when the National Park Service and The Mariners Museum conducted salvage operations on Revolutionary War shipwrecks from the Battle of Yorktown. In 1973, as a result of the early salvage efforts and a subsequent study by the Virginia Historic Landmarks Commission (now the Division of Historic Landmarks), the area of York River bottom containing the Yorktown shipwrecks became the first underwater site to be named to the National Register of Historic Places.

In 1975, a brief literature search verified that numerous historic ships had sunk in Virginia waters. In that same year, a survey of