Introduction

As the newly elected Chairman of the RISAA Artificial Reefs Committee I am proud of the work that RISAA and this committee are doing encouraging the development of artificial reefs in Rhode Island and educating the fishing public through publications like this. Our committee is a relatively new one, formed less than 3 years ago. I became Chairman in late 2007. Our committee is working to promote the construction of artificial reefs as fish habitat and fishing locations in Rhode Island waters. We are coordinating with the RI Department of Environmental Management (RIDEM) as much as possible to complete a Reef Plan for the State so that construction of new reefs can move forward. We are also monitoring the few existing artificial reefs that have been created in RI waters. For example, much of the concrete rubble from the demolition of the Jamestown Bridge was used to create two artificial reefs off the southern coast of Newport as well as significant rock piles around the bases of the former bridge piers. We have monitored these reefs and I am pleased to represent RISAA on the Artificial Reef Monitoring Plan Advisory Committee (ARMPA), which RIDEM has formed to follow how these reefs are developed and used and to assure that the Post-Development Monitoring Plan is being completed.

Two years ago Rhode Island had only a couple small experimental reef structures. In 2007 we took a major step by the creation of the reef off Sheep’s Point and that one off Gooseberry in addition to the material mentioned above around the bases of the former bridge piers. I took a diver to the reefs in August 2007 and based on his photographs I am pleased to say that there is much growth and there are already fish on the reef off Sheep’s Point. One significant issue however is the rebar sticking out. There is much rebar and it is a hazard to divers plus it will make it impossible to set lobster pots, or fish with rod & reel due to the snagging problem. Just while the diver was down I caught one nice 21” fluke, but lost one rig to the bottom. The second issue that I noted is that the site is just east of a very large fish trap. By establishing the reef we are trying to attract people to the area to fish & dive, but this fish trap becomes a significant hazard to navigation. Coming from the west one must be aware of the trap and proceed to the reef with care. Removal of this trap should be a high priority for this reason. I brought these issues to the attention of the ARMPA in August.

We look forward to the day when we have a Reef Plan in place and we can obtain vessels to create new reefs to enhance fish habitat and create more places for recreational fishermen to enjoy. RISAA has already been approached by people willing to contribute both boats and services needed to prepare the boats for a future as a reef, so we are optimistic that when all of the planning is complete we will be able to move forward with additional reef development. In fact I think the military should consider the Russian submarine now sitting on the bottom of Providence Harbor as a permanent resident of one of our reef sites once it is brought up and prepared appropriately.

RISAA would like to thank RIDEM from Director Sullivan to Richard Satchwill and his assistants in the Division of Marine Fisheries for all the work that they are doing monitoring the new reefs south of Aquidneck Island and preparing for a scientific reef monitoring study of their own. RISAA looks forward to making great strides with RIDEM in the development of more reefs in the coming years.

If you are reading this and are not a RISAA member I encourage you to join this very active organization fighting for the future of recreational fishing in RI. If you are a RISAA member and are interested in working on the Artificial Reef issue you can contact me to join the Artificial Reef committee at hittinger@RISAA.org to express your interest. This is certainly a committee that will have much to do in the future as we in the “Ocean State” begin to catch up with many other states in developing new reef locations. -Richard Hittinger
The primary goal of the project is to construct three artificial reefs from Reef Ball™ artificial reef modules that will provide habitat enhancement for depleted stocks of commercially important demersal finfish (e.g., tautog, scup, and black sea bass) in Narragansett Bay, Rhode Island. The project will restore approximately 1.25 acres of nearshore rocky reef habitat at three sites in the bay. The project will also conduct monitoring on the reef to quantify succession and measure the effectiveness of the artificial reefs.

Over the past several decades, anthropogenic and natural perturbations, including eutrophication, sedimentation, and changes in land use patterns have contributed to the loss of nearshore reef habitat. Concurrent with the loss of reef habitat in Narragansett Bay has been a decline in finfish, which face the joint threat of habitat loss and increased fishing pressure. Decreased abundances are especially prevalent for fish whose life history patterns are integrated with nearshore reef habitat, such as the tautog and black sea bass. Tautog and black sea bass are valuable resources in the Northwest Atlantic, ranking among the top recreational fishes with average annual harvests of 2,500 and 1,700 metric tons, respectively. Both species inhabit reef-like structures during all post-larval stages, with reefs providing shelter and access to food. The dependence of tautog and black sea bass on specific habitats (e.g. rocky reefs and oyster beds) makes the loss of these habitats a threat to the fishery resource. For example, recent stock assessments by the Atlantic State Marine Fisheries Commission (ASMFC) and the Northeast Fisheries Science Center (NEFSC) indicate that tautog and black sea bass numbers have declined over the last two decades. The loss of reef habitat, in conjunction with other anthropogenic and natural factors, may account for the decline in these fish populations. Furthermore, these stocks may be unable to recover because of the limited availability of suitable nearshore reef habitat for juvenile fish. The establishment of new “reef” habitat by artificial reef programs may be used to mitigate habitat degradation, and thus, restore finfish numbers to historical levels.

From a scientific study perspective, the ability of artificial reefs to serve as a conservation and restoration tool are poorly understood and requires purpose built, replicated artificial reefs to be effectively studied. Understanding the ability of artificial reefs to sustainably augment populations of commercially and ecologically important species is a critical step towards the effective management of coastal marine ecosystems. While the acreage restored by this project is relatively small, it represents a significant augmentation of the mid-bay nearshore reef habitat in Narragansett Bay. Furthermore, a great deal of information can be gained both through research and through partnerships among scientists, fishermen, and the community that will arise from the project. To this end, the secondary goals of this project carry as much value as the primary goal.

RISAA has offered our support for the proposed creation of artificial reefs for the scientific study of how the benthic community will develop around such a reef in Narragansett Bay. The following are excerpts from such a proposal by Jason Krumholz of the URI Graduate School of Oceanography and Dr. David Taylor of Roger Williams University.

**Progress Report**

Dick Satchwill is Marine Fisheries Manager with the Rhode Island Department of Environmental Management, Division of Marine Fisheries and is responsible for the management of the artificial reefs program in the State of Rhode Island. He offers the following update.

In deep turbid, temperate waters, the fouling community, is known as the turf community. The Turf consists only of animal life that attach to the reef substrate, such as mussels, barnacles, hydroids, bryozoans, and sponges. Most of these animals are fast growing and short lived. Fouling animals live for only a few seasons to a few years depending...
upon the species. The fouling community is one of the most important components of the reef community. While this community may take two to three years to mature, it is very dynamic and in a constant state of flux due to the constant succession of organisms. These organisms also provide a food resource for fish and other organisms and shelter or refuge for species of mobile invertebrates.

In addition to fouling organisms that are attached to the reef substrates, the epifauna also includes hundreds of species of small mobile invertebrates, such as crabs, shrimp, isopods, amphipods, worms, snails, and starfish that inhabit and find protective cover within the turf community. These mobile invertebrates represent a prime food resource for reef fishes and thus, warrant investigation. Mobile epifauna are small and cryptic and impossible to inventory with divers. They are also difficult to collect in scrape samples since they can swim or crawl out of the sample. An effective way to collective representative samples of mobile epifauna is with small, experimental habitats that can be encircled with mesh bags by divers and returned to the lab for analysis. Two units will be hauled from each reef per year for a period of five years.

Twenty two Habitats will be constructed and deployed in the weeks of March 15, and 22, 2008 so that Investigators can monitor the development of artificial reefs beyond the disposal of demolition debris from the Jamestown Bridge which created the reef program out of necessity. We need to include projects like the ones described in this newsletter by Dick Satchwill, Jason Krumholz and beyond.

There are some easy larger targets in our own back yard for artificial reef consideration. The Russian submarine, in Providence, which is currently sitting at the bottom of Narragansett Bay where it was docked, is already an artificial reef in a place where no-one wants it to be. The Saratoga is on it’s way to becoming a museum but the Forestall sits next to her sister rusting, waiting and costing tax payers millions of dollars. These old vessels could be artificial reefs on our pre-approved sites. This is not a pipe dream. It happens elsewhere in the country on a more frequent basis that you might think.

The USNS General Hoyt S. Vandenberg was recently at Norfolk, VA shipyard where workers prepared it for sinking by removing environmental hazards. Plans are to scuttle the ship in the Florida Keys National Marine Sanctuary off of Key West on May 15. Officials with Reefmakers, the organization overseeing the project, are making final preparations at the writing of this newsletter. Supporters say the Vandenberg project will provide additional marine habitat and a new attraction for recreational divers. Before it was decommissioned in 1983, the Vandenberg also tracked manned U.S. space missions, beginning with Mercury blastoffs in the early 1960s. The ship played a role as a Russian science ship in ‘Virus’, a 1999 motion picture starring Jamie Lee Curtis.

From our last Newsletter:

We have the basis of a program that few other areas of the country enjoy. It takes years to acquire the necessary approvals for artificial reefs from state and federal governing agencies. We have three fully approved artificial reef sites of which only two are presently in service and those two are only fifty percent utilized. We are far ahead of the game in a complicated and detailed process of creating artificial reefs. We should take advantage of the position we are in to further a program that could become an environmental and economic model for the rest of the nation. “Environmental” and “Economic”; how many times do you hear those two words used together on the same side of a discussion instead of on opposite sides of an argument?

Here we are. One year later and progress, like the kind we are seeing on a small scale, is good. Planning for more significant artificial reef projects for the future is better. RISAA will play a significant role in ensuring progress continues. We are happy to see the small steps being taken, but must learn to take the greater strides demonstrated by our friends in Florida, New Jersey, California, and in other locations where significant artificial reef projects benefit the “Environment” and the “Economy”.

In this time of greater environmental awareness and increasing economic challenges, artificial reefs present a sensible response to both of these modern issues.

The RISAA Artificial Reefs Committee is a continuing example of the effort to improve and promote recreational salt water fishing through endeavors that benefit all of the people of this great state. The potential educational, recreational, environmental and economic benefits of artificial reefs are too real to ignore. So, don’t let the
R.I.S.A.A. Artificial Reefs Committee be
alone in writing letters, sending emails or
directly approaching local legislators to
let them know that we are interested in
seeing progress on the development of
artificial reefs in the State of Rhode
Island. Individual citizens, organizations
and businesses alike share the same stake
in our future.

—Henry Cugno

Private Sector News

The RISAA Artificial Reefs Committee will be contacting other organizations in the private sector which have a stake in the development of artificial reefs in Rhode Island.

If you or your organization have an interest in artificial reefs, please feel free to contact us. We look forward to including information from the private sector in this section of the newsletter in the future.

Contact Us

You can contact us by mail at:
R.I.S.A.A.
6 Arnold Road
Coventry, RI 02816
Attn: Artificial Reefs Committee

By Phone/Fax:
401-826-2121
401-826-3546 fax

By Email:
Hittinger@risaa.org

Please visit the RISAA web site for all RISAA news and scheduled events at:
www.RISAA.org

Approved Sites

Map of Approved Artificial Reef Sites and Drawings of Site Layout

The following pages show the locations and layouts of the approved artificial reef sites in Rhode Island.
PLAN
SCALE: 1"=160'

SITE FOOTPRINT:
325,000 S.F.
7.46 ACRES

12 MOUNDS x 600 C.Y./MOUND =
7,200 C.Y. CONCRETE PER SITE

CONCRETE DEBRIS MOUND SECTION
SCALE: 1"=20'

SHEEP POINT SITE

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GOOSEBERRY ISLAND SITE

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R.I.S.A.A. Artificial Reefs Committee Newsletter / Spring 2008

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

REMOVAL OF THE
OLD JAMESTOWN BRIDGE
WEST PASSAGE, NARRAGANSETT BAY
NORTH KINGSTOWN AND JAMESTOWN, R.I.
WASHINGTON AND NEWPORT COUNTIES

ARTIFICIAL REEF LAYOUTS
MARCH, 2005 SHEET 18 OF 19
RISSA Artificial Reefs Committee

Rhode Island Saltwater Anglers Association
6 Arnold Road
Coventry, RI 02816

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