

The Shinnecock Tribal Oyster Project

Photographs by Wickham Hunter

Give a man a fish
and you feed him for a day;
Teach a man to fish
and you feed him for a lifetime

The shellfish industry has deteriorated dramatically during the last 25 years due to overharvest and the introduction of disease, oyster drills and starfish. Our purpose here on the Reservation is to develop a shellfish production system, through the means of a hatchery that is versatile to rear a variety of shellfish.

It began when the Tribe applied for a grant from the New York Community Trust Fund in 1974. The grant was approved to permit four Shinnecock members to attend the Lummi Indian School of Aquaculture in the state of Washington for one year. The goal of the school was to give Indian people a chance to learn aquacultural techniques and possibly apply this schooling to their reservations.

The school offered all phases of academic studies as well as practical working experience in the world's largest oyster/fish producing hatchery at the Lummi Project.

After one year at the school, the tribe decided to try an aquaculture project of its own. With the help from the four students and the American Indian Development Association which assists Indians to farm the waters and land, the tribe organized the Shinnecock Tribal Oyster Project to research the possibility of replenishing Shinnecock Bay.

Upon returning to the Reservation and developing the Shinnecock Tribal Oyster Project, primary factors had to be established which entailed basic construction and experimenting with tray culture, studies of the chemical and biological environment of the bay and locating and transporting sources of oyster seed. The only natural set on Long Island that could be transplanted was *Crassostrea Virginica*, the American Oyster. Three thousand bushels of oyster seed were for transplanting purposes. The oysters would be placed into four hundred artificial

beds called oyster trays that were constructed and placed in shallow ponds surrounding the Reservation.

During the period from April 1977 to June 1978, a mini-hatchery was constructed on the Reservation to prove that Shinnecock Bay had enough stability to support shellfish life on a large scale. The hatchery was also designed to prove the feasibility of a future full-scale shellfish hatchery. It was the first of its kind in the Town of Southampton.

At the same time as establishing the hatchery, grow-out concepts were proven. Shellfish were grown and cultivated to market size. Two full years of production were spent in the hatchery during 1979-81 which resulted with approximately 40,000,000 cultured oysters. Approximately 1,000,000 seed clams were grown in the system and later sold to the local baymen's group for replanting.

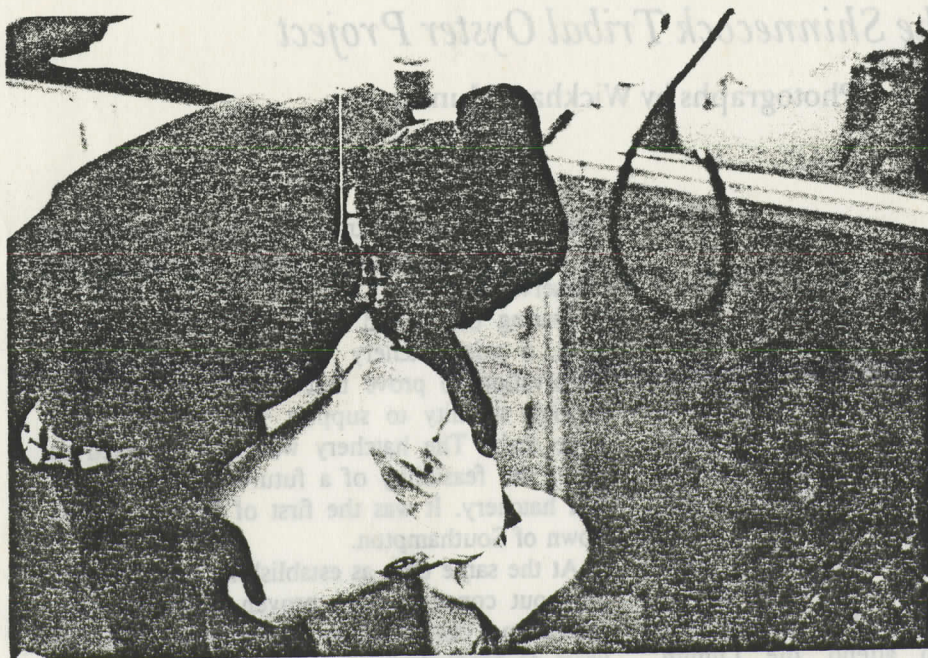
Because the mini-hatchery proved to be very successful, a larger hatchery was being considered. Therefore, in the fall of 1979, E.D.A. approved \$295,000 to construct a 5000-square-foot hatchery. Later, the grant was amended to include solar energy as a source of heat.

A considerable amount of technology transfer has been used at Shinnecock in designing the country's first solar shellfish hatchery. The introduction of solar energy into a hatchery will bring about a considerable amount of fuel saving; a projected 60% cost saving over a six-month spawning season. This energy alternative will have a widespread effect in the aquaculture industry.

The job opportunities for the local community here on the Reservation have increased because the technicians and trainees are members of the Reservation. A projected 15 to 20 jobs will be created over the next two years in a number of areas.

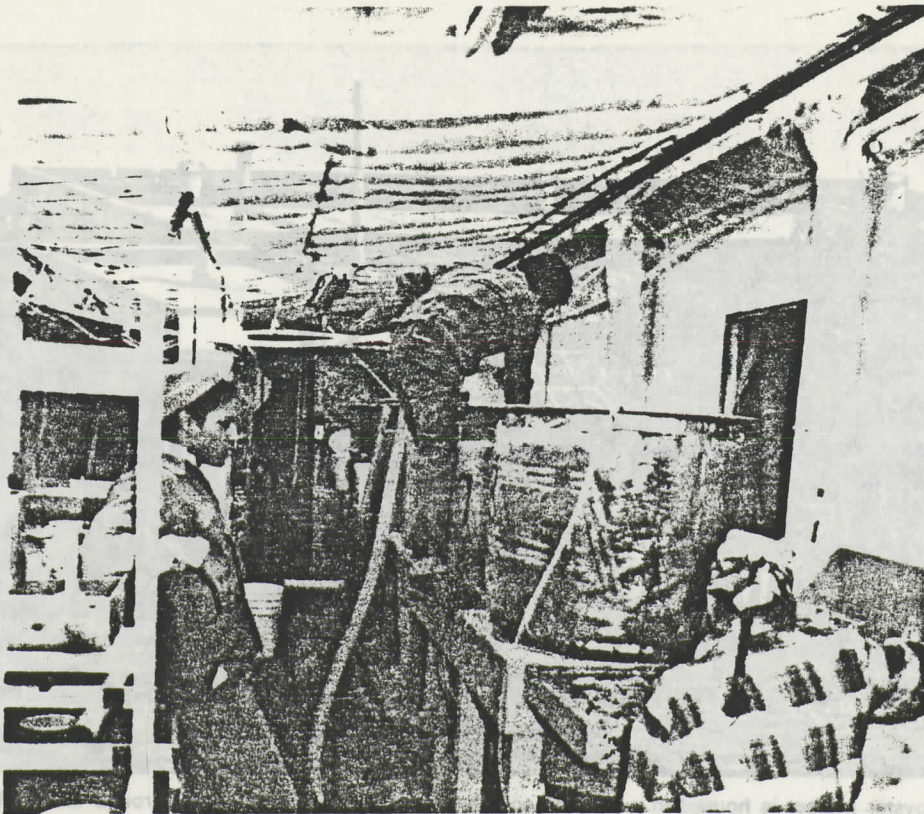
In conclusion, the Shinnecock Hatchery is the result of a seven-year effort of the Shinnecock Tribe to become self-supporting.

Public information statement prepared by the Shinnecock Tribal Oyster Project.



1. During the first stage of the project's development, the Indians used laboratory facilities at Southampton College. In these photographs Ben Silva (above and right) and Lamont Smith (above) are identifying and selecting shellfish for spawning.





2. The next stage was marked by a move to their own facilities on the Shinnecock Reservation. Here Eddie Gumbs (both photos), Lamont Smith (above), and Rueben Valdez (above) are using makeshift equipment in a temporary building to carefully select and grow highly nutritious algae which will be fed to the shellfish.

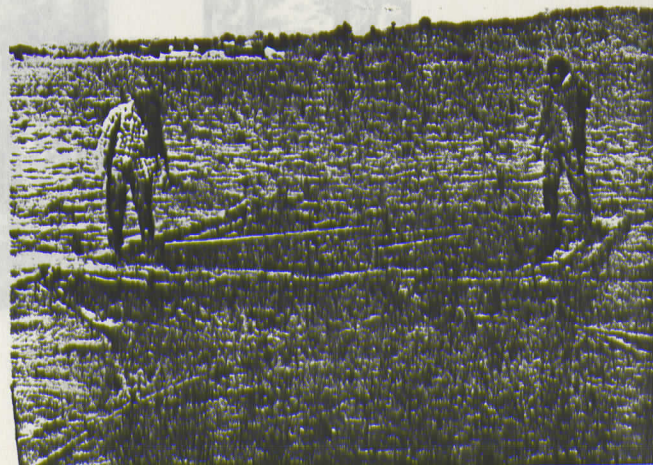




3. Today the oyster project is housed in a modern solar-heated facility. Here in the foreground Eloise Eleazer, Mable Cuffee, Edward Terry, and Brad Smith prepare oyster racks.



4. Next the racks are taken out to beds where they will remain in their natural environment until they reach a marketable size. In these three photographs, the work is being done by Bruce Marshall, Gerard Smith, and Brad Smith.





5. Periodically the racks are pulled ashore and the oysters are culled. Pictured here are Gerard Smith (above), Ben Silva (below), and Reuben Valdez (both photos) engaged in this process.

