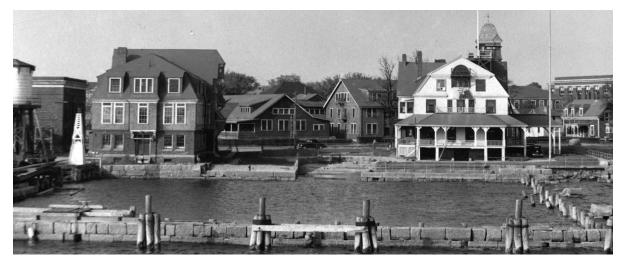
Remembrances of a Cruise with Rachel Carson Plus Miscellaneous Memories

by Roland L. Wigley

The cruise of *R/V Albatross III* in the summer of 1949 was historic for two reasons. First, Miss Rachel Carson was aboard. She had volunteered to work at sea on the research vessel, a courageous act for a female scientist. Second, Ernest Miles, a staff member at the Fisheries Laboratory, was on the cruise. He was the first black biologist to work

At the Lab, I was appointed a Biological Aide and assigned living quarters in a spacious, high-ceilinged room on the second floor of the Fisheries Residence Building. It had a huge window, but nothing else except three rather spare cots. The lavatory was down the hall. It was another large airy room fitted out with quaint plumbing fixtures and was shared with other



U.S. Fisheries (Fish Commission) Residence on right, Laboratory on left, the MBL Mess behind. (Woods Hole Historical Museum Archives.)

aboard *Albatross III*. Both scientists were pioneers. I was also on that cruise. In early June 1949 I had hopped aboard a train in my hometown of Pennington, NJ, changed trains in New York City, and landed at the train station in Woods Hole. My knowledge of Woods Hole was zero. I had to ask a stranger at the station for directions to the Fisheries Lab. It was operated by the Fish and Wildlife Service in the U.S. Department of Interior.

tenants. The rest of the Residence Building was also surprisingly spacious. Four or five families occupied apartments and half a dozen single employees had single rooms. Two other single rooms were used by college professors engaged in research at the Marine Biological Laboratory (MBL.)

A day or two after I arrived I met Stanley Cornish who shared the room with me. He was also a college student who had also been appointed a Biological Aide. We had a good time working together and chumming around during the week. He usually went home to Rhode Island on weekends.

Room rent was \$2.12 per week. It included a change of bed linens and a fresh towel. This low fee was a godsend to us, since the cost of lodging during summer in Woods Hole was totally out of our bracket.

Stan and I were especially fortunate in getting our meals in Woods Hole. There were no restaurants, but

Captain Henry Klimm, skipper of the fishing boat *Capt. Bill*, had harpooned a large swordfish. It was prepared for the evening meal. Each of us received a generous steak, cooked to perfection, of the most delicious fish ever served on Planet Earth. It was the talk of the town.

After a few weeks, we were permitted to eat at the MBL Mess Hall, located right on the corner across the street from the Fisheries, where the Ecosystems Lab is now. The atmosphere there was totally different. The MBL's Mess Hall had been in operation for a long time. It was set up to feed students, instructors and research scientists (mostly college professors.



Challenger Mess. (Woods Hole Historical Museum Archives.)

the Fisheries, MBL, and the Woods Hole Oceanographic Institution (WHOI) cooperated with each other. At first we had the privilege of eating at the mess hall set up in the front room of WHOI's Challenger House across from Little Harbor. It was a modest operation catering mostly to young male students and professionals. The dining hall tended to be noisy and crowded, especially after *R/V Atlantis*, *R/V Bear*, or other ships returned to port. The most outstanding meal was served one day when

Long tables with linen table cloths were set up parallel to each other. Each person was assigned a specific seat by Miss Belle (Isabel Downing), a sweet, dignified elderly lady who stood at a tiny podium just inside the front door. Diners would gather on the front porch, elders sitting in the several rocking chairs, the rest of us sitting on the broad railing or the wooden steps and eventually forming a line of standees. When the doors opened, each person who entered was checked off on a list by Miss Belle and

proceeded to his assigned seat. The food was very nice, the noise level much lower than at the Challenger Mess, and attractive waitresses added to the pleasant atmosphere.

The kitchen crew were mostly college boys who joined our informal softball league consisting of teams from the Fisheries, MBL, WHOI, the Coast Guard Base, and the crew of the *Cutter Hornbeam*. Great games, good times.

Rachel Carson and Albatross III

My primary duty as a Biological Aide was to work aboard *Albatross III*. On the day Cruise-26 departed,

I was a member of the scientific party aboard ship when two women with suitcases were escorted aboard by Chief Scientist Ray Buller and the ship's steward. They were berthed in a stateroom usually occupied by the Chief Scientist. At first we had no idea who

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these ladies were; the sailing orders that listed their names did not reach us until after the cruise. No fuss was made and discussions about them were minimal.

We soon learned that the ladies were Miss Rachel Carson and her traveling companion, Mrs. Marie Rodell, a pleasant person, slightly taller and younger than Miss Carson. Miss Carson appeared to be a quiet, refined, middle-aged woman of medium stature with a somewhat stern demeanor. At that time she was not prominent or well known. Much later we learned she was a professional wildlife biologist and publications editor employed by the U.S. Fish

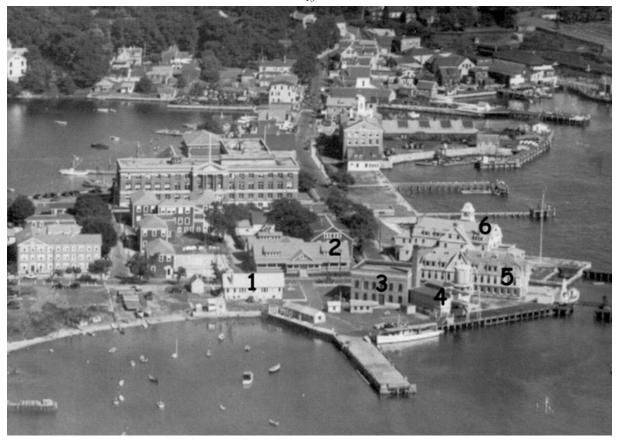
and Wildlife Service. Little did we know that she would later produce such powerful writings that would be heralded around the globe. There were no announcements or discussions about the ladies either before or after the cruise.

In retrospect, I realized that it took substantial courage for them to sail aboard the ship. It was considered "offlimits" for females to ship out on fishing boats or research vessels. Years later, in the mid-50s, Roberta Icke, a college student, stowed away on WHOI's research vessel *RIV Atlantis*. After several days at sea, she was discovered. The ship immediately returned to port and put her ashore to be disciplined. Therefore, I assume it was an ordeal for Miss Car-

son and Mrs. Rodell to sail aboard *Albatross III* because they knew they were "stepping-overthe-line." Both of them deserve our admiration for advancing women's rights as well as science.

When we departed Woods Hole the ladies were standing on the upper deck conversing

with the ship's officers. Most of our scientific party was on the main deck as we left the harbor and proceeded down Nantucket Sound to the open ocean. The ladies kept to themselves much of the time. They did not show up at the mess room where our scientific group ate at the main table with the ship's officers. Rumor had it that tea and toast plus other special foods were taken to their stateroom. When I first saw them, they appeared on the upper deck walkway in front of the bridge, a fine observation spot to view the fish-catch and trawl net operations. They were accompanied by both Captain Collins and Chief Scientist Buller. The men were pointing



Woods Hole in the 1940s when Rachel Carson was an employee of the Fisheries Bureau and made several summer visits. Key: 1 – The Cottage, 2 – MBL Mess Hall, 3 – Net Loft, 4 – Coal Bunker, 5 – Fisheries Lab, 6 – Residence. The Victorian-styled residence is likely where Rachel stayed during these visits. (Woods Hole Historical Collection.)

and gesturing, presumably describing how the net was hauled back aboard and the catch emptied from the cod-end. No doubt they also commented on the larger fish and invertebrate species being spilled out on the deck. Fish stocks were relatively healthy at the time.

The study of fish populations at sea was at a very early stage of development in 1949. Essentially it consisted of analyses of trawl samples taken at statistically determined locations. The purpose of Cruise-26 was to assess species composition and geographic distribu-

tion of groundfish using a modified 1 1/2 Iceland otter trawl. This was a huge net for sampling fish. Sometimes it caught enormous quantities.

It took substantial time and work to set or retrieve this enormous trawl. It was operated from the ship's starboard side. One otter trawl door was worked from a forward gantry and the other from the gantry aft. Bottom rollers were brought over the railing to hold the net in place while the cod-end was hauled in and emptied. The scene on deck was exciting when the trawl was coming up. Forewarned by the monotonous grinding noise of the winch and cables, the slam-bang of otter doors hitting the gantries, and the loud thumping of the rollers, we anxiously anticipated seeing what had been caught. Emptying the catch often resulted in large piles of groundfish overflowing the pens on the main deck forward. Scattered fish would flap and slide around on deck and in the scuppers. An assortment of live crabs, lobsters, starfish, orangered sea anemones, various mollusks and ascidians would crawl and slide around as the ship rolled. Seagulls would be everywhere, hovering overhead, screaming all around the ship, and feeding on the fish that floated out of the wings and other forward net-parts. Red hake and white hake with distended bellies were especially common floaters. The whole place was alive! It was fascinating to witness this mass of life; it was so different from our everyday experiences. Off-duty engineers, ship's officers, cooks, and the commercial fishermen who operated the fishing gear would often appear in the gangways and bridge walkway, curious to see what had been dredged from the deep.

We biologists would wade in and haul our subsamples off to the side and begin processing them. The fishermen would begin by discarding small or unwanted species, hundreds of them at a time. I feel sure Miss Carson observed this routine waste of fish many times and thought about the wider consequences to fish stocks. Large commercial fish, such as cod and haddock, were gutted and taken below deck where they were iced down and later sold at the Fish Pier in Boston.

Our scientific party collected scales and/or otoliths from selected fish species and tagged some yellowtail flounders; but our most time consuming - interminable at times - task was measuring fish lengths, hundreds of them. We used a measuring board fitted with an aluminum punch-strip on which we marked the length of the fish from snout to tail with an ice pick.

There were, of course, major differences in catch composition and quantity from place to place. Most often the catch consisted of a mix of many species: a few dominant ones like haddock and silver hake plus a large number of minor species. Also, there was usually a diverse assortment of sizes, anywhere from a 4 1/2 foot halibut to a tiny 3-inch sculpin. On rare occasions catches consisted of a single species, such as thousands of spiny dogfish shark that appeared to be all the same size!

One memorable haul consisted of just one gigantic, egg-shaped boulder. This put an enormous strain on the winch, cables, and netting.

When the work was done and everything cleaned up, four of us would gather in a tiny room adjoining the wet lab. It had a sturdy table surrounded on three sides by bench seats. We called this our card room. Ernest Miles was one of the most memorable card players. He loved to play Hearts, a game that fitted well with our work schedule because we could always start and stop at a moment's notice. We thought we could always tell when Ernie held the Jack of Diamonds or the Queen of Spades because a wonderful smile would spread across his face. That's how he earned his nickname, Smiles Miles. We had some real knock-down-drag-out Hearts games.

Sargassum (Gulfweed)

On one pleasant day, the vessel was a short distance south of Georges Bank in roughly 400 meters water depth where a special (non-survey) trawl haul was made. The weather was lovely and bright and the sea unusually calm. We were blessed to witness some

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wonderful sights. First of all the trawl brought up an unusual assortment of animal life - a whole new ecosystem of species from the continental slope: snipe eels, rattails, lantern fishes, leopard sharks, plus red crabs, strange shrimps, pieces of *Alcyonarian* corals and many, many other beautiful animals. In addition, there were clumps of surface-floating *Sargassum* seaweed (gulfweed) containing a marvelous assemblage of organisms. Everything from *Sargassum* fishes, crabs, shrimp, barnacles, and annelid worms down to the tiny pycnogonids that were clinging flat against equally tiny gulfweed air bladders was beautifully camouflaged. It was all new to me and very exciting.

Amid our whoops and hollers the two ladies appeared. Stan and I were in the starboard gangway adjacent to the wet lab dip-netting undisturbed clusters of *Sargassum* from the sea surface below. We had spread out an array of large and small white enamel trays in which we had added salt water and the live specimens. We hunted through the gulfweed and observed, admired, and then generally classified as many of these fascinating creatures as time permitted. Our main job was assisting professional biologists in processing the trawl catch; that too was an enjoyable task.

This occasion was the only opportunity that I and several other biologists had to talk with Miss Carson. Although she was not a marine biologist, she was generally familiar with *Sargassum* and salt water beach animals. Luckily for us, since both Stan and I were landlubbers, she recognized a jellyfish we had dip-netted as *Physalia*, a Portuguese-Man-of-War, and warned us about its potent stinging nematocysts. She showed considerable interest in the nice assortment of gulfweed specimens we had sorted out, and for a while she assisted with the processing and identification.

Fishing with the 1 1/2 Iceland otter trawl which Miss Carson saw aboard Albatross III in 1949 wasted large quantities of fish. Some of these were the young of commercially valuable species, others were kinds not sold then: sculpins, skates, and sharks. These fish were routinely and unceremoniously thrown overboard. It was a terrible waste. Another problem we did not consider in 1949 was the seafloor damage we were causing. The bottom habitat included benthic and epibenthic invertebrate animals such as ascidians, barnacles, bryozoans, sponges, corals, sea anemones, plus dozens of other groups, all of which would have been smashed and ruined by the rollers of our otter trawl. Can you imagine a fleet of large trawlers, fitted with rollers or weighted ground ropes, dragging back and forth over the seafloor day after day, year after year? Scallop dredges are another abomination.

At that time we didn't fully realize how fragile some of these creatures are. Two examples of this are the sand tubes and silt-clay tubes of amphipods and polychaete worms, both major fish foods that are easily demolished. Also, we didn't know that it would take half a century, or even a full century, of time for some invertebrates to attain full adult size.

Even the bottom structure itself, the rocks and sediments, has been battered, fractured and generally ground down. The whole ecosystem has been damaged. No wonder the fish stocks remain depleted.

Return to Woods Hole

Another job Stan and I enjoyed was transferring live fish from the ship to the aquarium, immediately after a cruise ended. For this purpose we used a four-wheeled dolly on which we placed a washtub filed with sea water. It was standard procedure to bring living fish and invertebrates back to the Lab for stocking the public aquarium. Prior to the last haul a live-well was made by fitting a large canvas tarp in one of the pens on the main deck. It was then filled with sea water and kept supplied with running water after specimens from the last haul had been added.

The Fisheries Aquarium was a fascinating place to check out from time to time. It then consisted of six or eight large glass-fronted tanks filled with running sea water. It was located on the ground floor



Woods Hole Railroad station, c. late 1940s- early 1950s. (Woods Hole Historical Museum Archives.)

of the Fisheries Laboratory's east end. In addition to specimens we brought in on *Albatross III*, some nice display specimens were also obtained from the Benson brothers of Martha's Vineyard who tended a stationary fish weir extending seaward from the entrance to Quissett Harbor. Harbor seals were kept in the Seal Pool, a rectangular granite enclosure near the flagpole. Other interesting aquarium features were the 'dry' displays: wall panels illustrating haddock growth, cod fecundity, oyster and clam biology, harpoons used in swordfishing, and commercial long-line fishing tackle. Although the aquarium was rather small and somewhat antiquated, it was a fine scene and attracted many visitors.

Since Stan had gone home most weekends, I palled around with John (Jack) B. Colton, now deceased. He was a fun-loving guy, a professional biologist on the Lab's staff. He was a decorated hero of WWII. He had been a Navy "frogman" (Seal) and a superb swimmer, who served in the Pacific Theater. Among his duties was the hazardous task of swimming underwater and attaching demolition charges on structures designed to thwart marine landing craft at beaches on various Japanese-held islands.

Jack was renting a tiny house on Nobska Road in Woods Hole and he had two prized possessions, one of which was a very large kettle. One of our favorite activities took place on either Saturday or Sunday. At low tide in the morning we would take the Lab's heavy wooden rowboat and row across Great Harbor to Penzance Point and dig clams and pick up a few small quahogs, both of which were very abundant. We dropped those off at Jack's place and made a foray to the A & P in Falmouth (no grocery in Woods Hole then.) For transportation, we used Jack's other prized possession: his old, beat-up beach wagon with the back part of the body constructed of wood. It took us everywhere, but sometimes reluctantly. In the afternoon we started cooking early. At supper time this very large (we thought delicious) chowder, supplemented with bread and beer, was shared with a few friends. Additionally, we treated ourselves to the sweet melodies of Artie Shaw, Benny Goodman, the Dorseys, and Glen Miller that emanated from a dated 78-rpm Victrola. Life was good!

About the author

At the time of the cruise Roland Wigley was a graduate student at Cornell University's Conservation Department studying with Professor Raney. Before entering Cornell, he had graduated from the University of Maine with a B.S. in Wildlife Conservation and had served three years in the Army as an aircraft mechanic and later as navigator on B-29 bombers during World War II. Upon completing his doctoral degree, he joined the staff of the Bureau of Commercial Fisheries in Woods Hole in 1954 as a fishery biologist. He had an enjoyable career specializing in benthic animals and retired in 1980.