Good Old Summer Times at the M. B. L. and Rhymes of the Woods Hole Shores

by

Winterton C. Curtis

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Foreword

The Enterprise begins herewith publication of the Woods Hole pages from autobiographical notes which Dr. Winterton C. Curtis has been writing, "just for fun", since his retirement.

Dr. Curtis came to the Marine Biological Laboratory in 1896 as a student in the Invertebrate Course. Then as now the course was conducted in Old Main, the wooden building opposite the main door of the brick building.

As a collector, as director of the Invertebrate Course and as an investigator and finally an enthusiastic oldtimer, Dr. Curtis has continued in close association with the M.B.L. He was an active trustee for many years prior to election as a Trustee Emeritus when he reached 70. Dr. Curtis will observe his 80th birthday on Nov. 4, 1955.

Dr. Curtis came to the "Lab" as an under graduate from Williams College. He went to the University of Missouri as an instructor in Zoology in 1901 after receiving his Doctor's Degree from the Johns Hopkins, and retired in 1946 as Professor Emeritus of Zoology and Dean Emeritus of the College of Arts and Science.

He is a past-president of the American Society of Zoologists, of the Union of American Biological Societies, and a past vice-president (Section F) of the American Association for the Advancement of Science. He was Chairman of the Division of Biology and Agriculture, National Research Council, for the year 1930-31, and connected with the Council in various capacities during the years 1923-35. He was an expert witness at the Scopes Trial in July, 1925 at Dayton, Tenn. During the academic year 1932-33 he was Visiting Professor at Keio University in Tokio, Japan, under the auspices of the Rockefeller Foundation. In addition to technical articles in his field of Zoology, Dr. Curtis is the author of a book entitled Science and Human Affairs (1922), and co-author, with Mary J. Guthrie, of a Textbook of General Zoology for which the fifth edition is now in preparation. More than any of his professional experiences Dr. Curtis values his connection with the Marine Biological Laboratory.

Dr. Curtis was born in Richmond, Maine, on the Kennebec river. In 1889 his family migrated to The Dalles, Oregon, where he lived for six years before coming east to complete the last two years of his college course at Williams and to continue with graduate work at the Johns Hopkins University.

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Good Old Summer Times at the M. B. L.

A future course director enrolls as a student in the Invertebrate Course in "Old Main." Study and recreation at the M. B. L. in 1896. Cap'n Veeder and Chief "Al" Lewis of the Sagitta. Under sail aboard the Vigilant. Picnic at Gay Head and Collecting trips with George M. Gray.

At Williams, where I spent the last two years of my college course and remained for a year as a graduate assistant, I was much interested in zoology. My teacher, Dr. James I. Peck, was then assistant director and in charge of the Invertebrate course of the Marine Biological Laboratory at Woods Hole.

Thus, I was introduced to the M.B.L., as we Woods Holers call it, in the summer of 1896, when I was enrolled in the Invertebrate Course. As a result I was connected off and on with this course for the next 15 years. Woods Hole has been my summer stamping ground ever since, despite experiences in Beaufort, N.C.; Friday Harbor, Wash.; Colorado, Wyoming, Honolulu and Japan.

As the M.B.L. was founded in 1888, its earliest days were over in 1896. The laboratory had achieved a national, even an international, reputation, but much of the beginnings were still there.

There were about 60 of us in the Invertebrate Course in the summer of 1896. Then as now the student had a lecture at nine daily, followed by two hours in the laboratory; and laboratory again with the instructors from two to four in the afternoon. There was time for a hasty dip at the bathing beach or off the Fish Commission wharf before dinner, or better a leisurely swim after four in the afternoon. Those who did not swim often worked until supper time and most of us came back for work in the evening unless there was a dance in the Town Hall, a moonlight sail, or a walk to Nobska "fussing a bunch of muslin," as we called a "date" in those days. We were housed in the same room of the "Old Main Building," as it is now called, that houses the Invertebrate Course today.

Since running salt water was available for the aquaria by courtesy of the Fish Commission which pumped it for us to a tank at the back of the building, it was not necessary to carry the salt water in buckets from the wharf as it had been in the earliest years of the Laboratory. The fresh water was pumped from a well in the unfinished space below the Invertebrate room, each janitor giving a hand at the pump as necessary.

Collecting trips once or twice a week, dependent upon weather and tide, had been a feature of the course from its beginning. These trips were made first in small rowboats; then a large ship's boat was added; and finally the original Sagitta, a "second hand" steam yacht, was purchased because she came cheap, as is the way with used yachts.

The Sagitta had an open deck forward, a cabin amidships that was separated into a pilot house and a boiler-engine room and a covered cockpit for passengers. There was just enough deck space astern for standing and for handling a dredge. The floors of the fore and aft compartments were set low, and the floor of the engine and boiler room was even closer to the keel. There were coal bunkers on each side of the engine-boiler room. A speaking tube ran from near the wheel to the engine room. There was no deck space along the midship section, only a narrow ledge on which one could pass by holding to a rail on top of the cabin.

Although Nat Herreshoff had designed her and she had been built by a distinguished boat builder of Boston, the Sagitta rolled badly even in the moderate waves of Vineyard Sound, and the bilge keels that were added later did little good.

The Sagitta's captain, John Veeder, and her engineer, "Al" Lewis, both served the laboratory until they retired years later when the M.B.L. had what might be called a "fleet" of boats, and "Sagitta I" was known only to the oldtimers.

The sensation of our collecting convoy in 1896 was the Vigilant, probably named in derision for one of the cup defenders whose name was then familiar. She was unlike any two-master I had ever seen, pointed at both ends and almost half as broad as she was long. Because she had been purchased from a Portugese fisherman I always suspected that the Vigilant was of foreign origin. There was a swordfisherman's pulpit on the bowsprit, and she steered with a tiller in the rudder post astern. I've often wondered how old the Vigilant was when the Laboratory bought her. Wooden vessels last such a long time if given the proper care. Some years ago I read of a fishing schooner that had been a privateer in the War of 1812 and that came into New York Harbor well over a hundred years later, still useful.

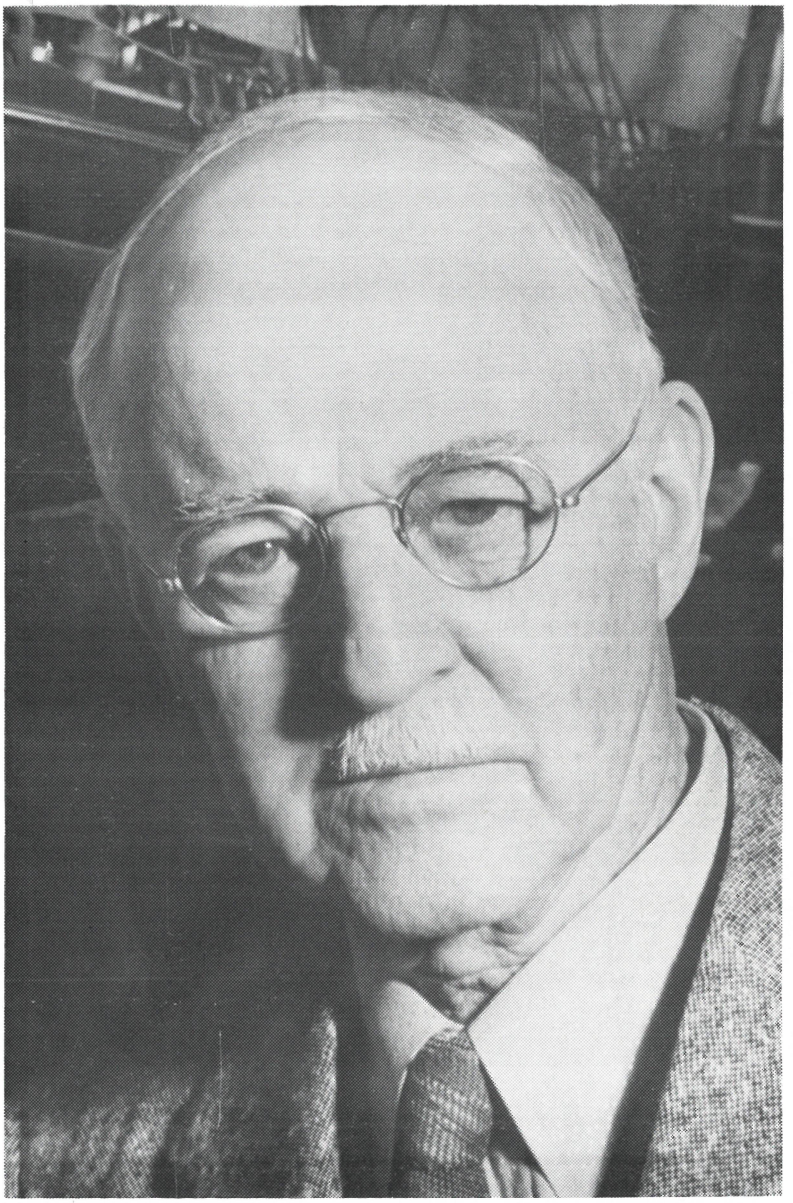
On collecting trips the class and the instructors just about

covered the deck of the Vigilant as we set out in tow of the Sagitta. Arrived at the collecting grounds we went ashore in row boats that had been stowed on deck or towed astern. When we came home, if the sea was rough, we took the row boats aboard and, while the Sagitta sneaked back near the shore, the Vigilant came home in the open under full sail. We always hoped this would happen. Those collecting trips, to dig for worms at Hadley Harbor, collect along shore at Tarpaulin Cove, dredge off Nobska, tangle for urchins and starfish in the Sound, wade the flats at North Falmouth, or net blue crabs at Waquoit were the high lights of that summer despite my long and fascinating hours over microscope and dissecting pan.

Best of all these trips was the last one of the season, — an all-day picnic trip to Gay Head. After lunch ashore, visiting the light house and, at the risk of a landslide, a pause on the edge of the cliffs to see the colors in clay and water, we started for home. It was the day for the annual race of the New York Yacht Club from New London to Vineyard Haven. They were upon us as soon as we were well out in the Sound. Since the wind was very light, not enough for the Vigilant to make much progress, we were towed slowly by the Sagitta while the yachts in the race, and many others that were just following along, passed us with all sails set.

In the summer of 1897 I worked for the Laboratory as a collector along with its collector-in-charge, George M. Gray. We had the Vigilant and the Sagitta to take us about when they were not needed by the classes. Going in the Sagitta, with Captain Veeder and "Chief" Lewis, or going in the Vigilant was better than going with the classes. With nothing in tow and with no sea running our converted steam yacht made good time, particularly when we were headed home and after Captain Veeder had pulled the jingle bell and called through the speaking tube, "Shake her up, Al." However, we did a good deal of collecting with a light clinker-built row boat which, with two at the oars, took us to nearby places in what then seemed a hurry if we put our backs to it. That was a good rowboat if she did leak at times. Once, when I complained of this, Cap Veeder remarked, "Boats is made to go on water and not on land. Look what you do to her. Yesterday I seen you and Gray dragging that boat overland to git to that 'gutter' by a short cut."

Often we were out before breakfast to dig at low tide. If we got home late in the afternoon we came back at night and put up the perishables. In the last month of the summer we were busy getting off the orders for preserved dissection and museum specimens that were becoming a source of income for the laboratory. I was told that the trustees were much pleased when informed that orders totaled $400.00 in early August and would probably exceed $500.00 by the end of the summer. There had been no provision for winter sales up to that time, but in the fall of 1896 a shipment of our preserved material was sent to Williams College and I shipped these specimens on order from there. The total of these winter sales was about $125.



Dr. Winterton C. Curtis

The young collector spends a wet summer in sou'westers. Portuguese men-of-war are scooped from Vineyard Sound in bucketfuls. George Gray fights a collector's war with "Colonel" Wamsley. Gertrude Stein. Professor Dahlgren's shark.

That summer of 1897 was a wet one. It seemed to me I spent most of the time in my yellow sou'wester, slicker and trousers and my long rubber boots. It was also a summer of southwest blows, which were good for bringing material into Vineyard Sound from the Gulf Stream. There never were, and never have been since, so many Portugese-men-of-war collected in any one summer as during this year 1897. One calm day in the Sound they were floating by us as far as we could see, so that we had only to stop and drift until we had filled to capacity every bucket aboard. There were also goose-neck barnacles aplenty on floating timber, and innumerable tufts of Sargasso seaweed with its myriad life.

In competition with the laboratory's Supply Department was a chap named Wamsley, later the "Colonel" Wamsley who worked for the M.B.L. during many summers, teaching down south in the winter. Gray, who was very loyal to the Laboratory, didn't like Wamsley because the latter had learned his trade in the Laboratory's employ and had then gone out to set up for himself in competition with us; hence, we got ahead of Wamsley whenever we could. One afternoon about four-thirty, thinking that there might be things coming ashore on the southside of Nonamesset, as the tide and wind had been right for this all the afternoon, we rowed to Sheep-pen Cove and then went overland, each of us with two buckets and a dip net. Going around the first point, we saw Wamsley ahead of us. As he did not see us, we dodged back behind our point and then inland, where we ran out of sight from the beach until we came out beyond the next point. When

"Unlike any two-master I had ever seen."

Schooner Vigilant with Invertebrate Class of 1897 aboard. "Class and instructors about covered the deck."

Wamsley rounded this one we were ahead of him. That is a good sample of how Gray and I got after things that summer when we were all there was to the Supply Department.

Our quarters were under the central part of the "Old Main." To this hole in the ground we carried our water, salt and fresh, in buckets from the first floor through a trap door and down steps, steep as a ship's companionway, to our place in the cellar. Working at night, I got so I could come up to the Invertebrate Laboratory, fill two buckets with water in the dark, make my way until I could begin to feel for the trap door opening with my feet, and so on to the foot of the steep stairs where there was a glimmer of light from our place of business.

The work was hard and some of it pretty heavy for one with my build. But I was as much at home in a boat as on land. The chap who succeeded me in the summer of 1898 was a big boy from Iowa. He had the beef, but he could barely clamber from a row boat to the deck of the Vigilant when the waves were running in the Sound, nor could he shove a boat off from shore without getting a foot wet.

This was the summer when Gertrude Stein took the Invertebrate Course along with her brother who was later one of my fellow graduate students at Johns Hopkins. She was then a student in the Johns Hopkins Medical School. As I remember it, she tired of medicine and did not graduate. For us that summer she was just a big, fat girl waddling around the laboratory and hoisting herself in and out of the row boats on collecting trips.

This was the summer when Prof. Ulric Dahlgren tried to deliver a live shark to the Battery Park Aquarium in New York City. Dahlgren was a grandson of the Admiral for whom the famous Dahlgren gun, used on ships in the Civil War, was named. He had spent many of his boyhood summers on Nantucket and was thus a sailorman by training as well as descent. His family was of Scandanavian origin and he had the face, through not the build, of an old viking. We called him "the Admiral." As one of the younger investigators at the M.B.L. and a member of the Invertebrate Staff, he had the run of the boats,

Gertrude Stein at Quissett Harbor

In this photograph, taken at Quissett Harbor, July 31, 1897, Gertrude Stein's brother holds the jar aloft. The fat girl is the famous Gertrude Stein herself. Both were students in the Invertebrate Class that summer. Dr. Curtis is the man in boots behind Miss Stein.

and he sailed the Vigilant for all she was worth.

I was not able to go with the Admiral on his shark expedition because I was needed for the last days of work with the Supply Department in this summer of 1897. I did plan to meet him in New York after the shark had been delivered and to sail back with him to Woods Hole. His plan was to build a crate big enough for a ten foot shark to thresh about in, catch the shark with hook and line and manoeuver it into the crate which would be put overboard after they had reached the fishing grounds. There was no trouble catching the shark, for Nantucket Sound was full of them. And there was not too much trouble getting the shark into the crate and battening down its hatch. The trouble began when they started to tow. With the Vigilant's sailing qualities and with that crate astern, one can imagine how she sailed even before the wind, — above all, when she tried to come about on a tack. Still, by some miracle they made it as far as Bridgeport, Conn There they ran into a night squall, and the towline to the crate parted. The next morning they cruised back and forth with Dahlgren at the masthead looking for their tow, but they never found it. If the crate had had a mast and flag as a marker, it might have been sighted. Floating as it did, with its top almost flush with the water and without such a marker, it could not be seen unless nearby.

Therefore, when I reached New York and called at the Aquarium, I was told that a telegram had been received from Dahlgren, telling of his loss. The end of it all came when one of my friends, who had accompanied the Admiral and the shark, sent me, some weeks later, a clipping from a New York paper telling of a huge crate containing a shark that had come ashore on the north side of Long Island and how the fish had died before the next tide.

"Admiral" Dahlgren goes junketing aboard the Vigilant. The author becomes his Man Friday. Risky navigation at night when sail filled Vineyard Sound. Collecting trips aboard the Grampus.

During the summers of 1898-99 Prof. Dahlgren was Assistant Director of the Laboratory and in charge of the Invertebrate Course. It was then that the Vigilant came into her own. Originally, she had only mainsail, foresail and forestay sail. She had a top mast only on her mainmast. The Admiral persuaded the authorities that she would sail better with more canvas, so a foretopmast, topsails and two jibs were added. The outcome of these additions was disappointing. The Vigilant still sailed about as much sideways as ahead in tacking, and was slow in coming about, although the additional sails gave her a smarter appearance. However, after their initial summer these sails were seldom used, being more trouble than they were worth.

Dahlgren had begun using the Vigilant after hours before he was in charge of the Course, and this use grew with the years. If she was not needed of a weekend, he would take the necessary food aboard and set out with several invited friends for a Sunday at sea. He usually went to Gay Head, anchoring there for the night.

After some dredging and towing to give a semblance of business, he would be back in Woods Hole by Sunday night or early Monday morning. If the tide and wind were right, he might try to come home by way of the Bay and so through the Hole, but this was risky business and frowned on by the authorities. The great adventure he always hoped to realize was a circumnavigation of the Vineyard, but so far as I know this was never accomplished.

Another unrealized ambition of the Admiral was to harpoon a swordfish. Much harpooning of these fish was done in that day from sailing vessels. If a boat handled well enough and the wind and tide were right, it was possible to sneak up and get the harpoon in when the fish was not moving and, as the fishermen called it, "sleeping" near the surface with its dorsal fin visible. With steam power it was easier although even a slow-moving propeller might disturb the fish and frighten it away.

I began going on these trips with Dahlgren in the summer of 1897 when I worked in the Supply Department. Often, he had only landlubbers for guests and needed someone who could steer when he was in the pulpit on the bowsprit, or could look after things forward when he was at the tiller. I couldn't "reef, hand and steer" like a real sailorman, but I could do all that was needed aboard the Vigilant, except that I didn't feel like taking the full responsibility for her on a trip. There was the added advantage to Dahlgren that I was a good camp cook, using a kerosene stove instead of a camp fire. If he had to do all the cooking and all the sailing himself it was too much. Thus, I became his Man Friday even during my second summer at Woods Hole. If the invitees were seasick I had all the more work, for they could neither fish nor cut bait.

The Admiral told me of one trip when I was not along and he had only landlubbers on board. He was in the pulpit, had sighted a swordfish and was calling back instructions to his helmsman. "Put the tiller up," he yelled. Whereupon the helmsman pulled the tiller out of the rudder post and held it up. "No!", yelled the skipper. "Put it back in the post and then put it down." Whereupon the tiller was laid down on the deck.

After two summers of this Man-Fridaying, I began easing myself out of the job, and after a third summer the Admiral was no longer at the Laboratory.

The best trip I ever had on the Vigilant was one with Dr. C. M. Child and several students. We went to Gay Head and, with the wind just right next day, we sailed over and landed on No Man's Land. Going out and to No Man's Land, Child and I took turns riding the pulpit and steering. Our fellow travelers were too seasick to be interested.

Back at Gay Head about dusk, we started up the Sound with a light head wind but with the tide in our favor, hoping to reach Tarpaulin Cove and anchor there for the night, before the tide turned against us. We were near the Cove by midnight, the wind having freshened. The only trouble was that there had been an increasing number of schooners coming down the Sound and we had been crossing their tracks.

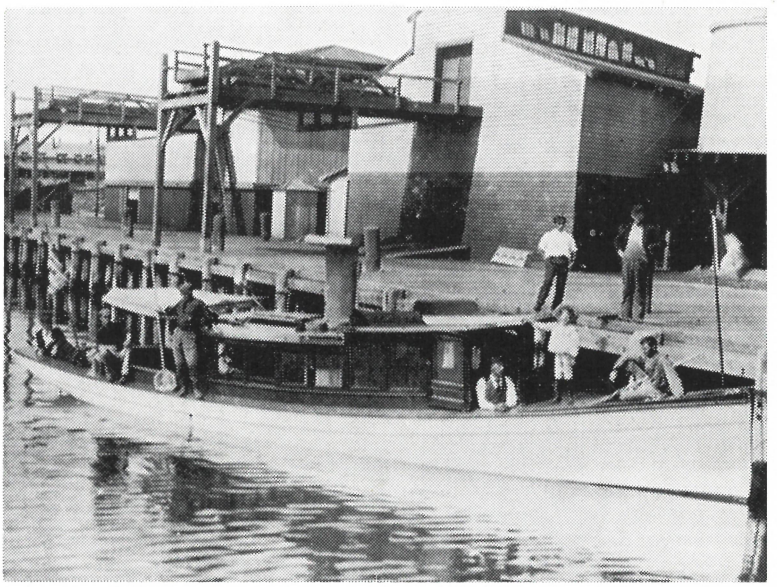
The night was clear though dark and as we neared the Cove we were blinded by the lighthouse beam; then all at once we found ourselves too close in shore and the only thing to do was to come about. This being the Vigilant's weakest point, she went into irons and we edged still closer to the shore. We tried again, and again would have missed and that time gone ashore, but Child yelled to me to put our shoulders to the boom and back the mainsail over so it would catch the wind. This we did, bringing the Vigilant about, and we stood out for open water.

By that time both tide and wind were against us, and the Sound was full of schooners making westward with a fair wind and tide. The natural thing for us to have done would have been to make short tacks near shore, where the tide is not so strong, and reach Woods Hole safe from the schooners that were tearing down the middle reaches of the Sound, but after our narrow escape from going ashore and with the darkness of the night, we preferred the open water; so, continued the remainder of the night making long tacks and dodging schooners. Child did the steering while I lay by the bowsprit straining my eyes for the on coming red and green sailing lights. Although we had our own lights and each schooner was supposed to have a man on watch on her forecastle, such a watchman could easily be asleep and the Vigilant with her weakness at coming about was no safe boat for such a pinch. Of course our situation was tame by comparison with that of a fishing smack watching for liners on the Banks of Newfoundland, but I recalled the lines:

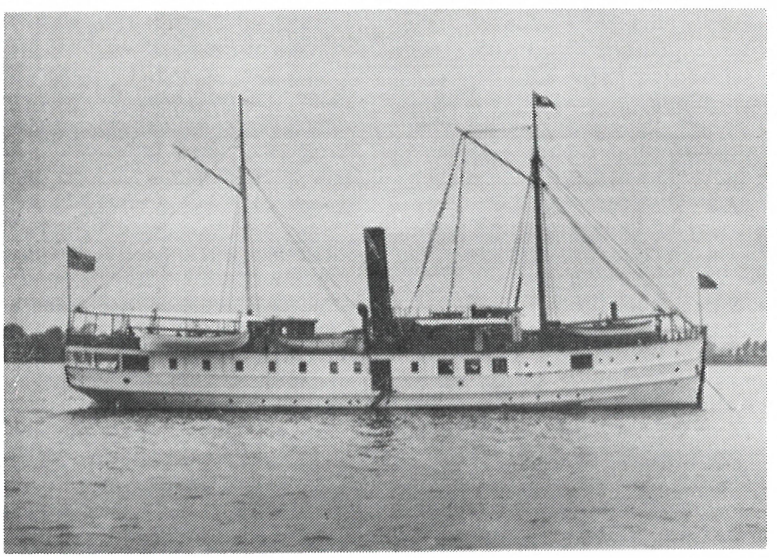
"We heard her a mile to windward, the liner that cut us thru,
As clipping the fog at a twenty knot jog she drove with her double screw."

We tied up just in time for breakfast, after which I went out with Gray to dig worms. I still remember how my eyes ached all that day.

The larger Fish Commission vessels commonly at Woods Hole during these summers were the steamers Fish Hawk and Phalarope, and the two-masted schooner Grampus. The Fish Hawk had evidently been built for work on rivers and sounds rather than for deep water, al-



Converted Yacht Sagitta



U. S. F. C. Str. Fish Hawk

though she was equipped for dredging as far out as the Continental Shelf and sometimes made trips from Woods Hole to the Gulf Stream. This could be done safely only when fair weather seemed assured, for she rolled badly even in a moderate seaway. It was averred that once she turned all the way over and came back up the other way. With her complement of officers and men and her collecting equipment she was worth seeing, and the courtesy of a collecting trip aboard her, sometimes extended to the Invertebrate Class, was eagerly accepted.

The Phalarope, like the Sagitta, was a converted yacht, purchased by the Commission for a song as compared with her original cost. She was available for M.B.L. use in emergencies. I recall that, not having any one who could do the job properly, Dr. H. C. Bumpus, who was then Director of the Fisheries Laboratory, would borrow our Cap. Veeder for a day or two to set the Commission's fish traps and in return let us have the Phalarope for a corresponding period.

The Grampus had been built some years earlier as a model to show the Gloucester fisherman the kind of vessel thought best for their use by the Commission. She was a two-masted schooner rather heavily sparred, a good steady vessel capable of going to sea and taking it. She had a large well amidship, where fish could be kept alive for days, and cabin accommodations for guest scientists as well as her officers. When I knew her, the Grampus had been far outmoded by the fishing smacks of Gloucester. By that time the Gloucester vesssels were being planned by some of the best designers in New England. Lightly sparred, as compared with the Grampus, and with lines like a racing yacht, they were built to ride out the heaviest storms; and when loaded, to race for home, hoping to be the first to reach port and thus get the best price for the catch. When the day of motors came, and these schooners were shorn of topmasts and jib-booms and had a deck house added, the day of grace and beauty was ended for the smacks of Gloucester.

Returning to the Grampus, her full complement of men was a captain, two mates, a cook and six seamen. Better than anything the Vigilant could afford was a trip aboard the Grampus, particularly one to the Gulf Stream. Like the other vessels of the Commission's fleet she was available for trips by specially invited zoologists during her slack season, which was the summer time. At this period her complement of sailors was reduced to three for reasons of economy. Hence she had need of extra hands when she took to the sea from Woods Hole. With my standing as Dahlgren's sailorman, I qualified for such emergency service. My best trip on the Grampus was the one made to the Gulf Stream when we rediscovered the tile fish.

Invertebrate Class of 1897

Rediscovering the tile fish and rowing Dr. Bumpus and his find to shore. The remarkable Gilman Drew. Experiences with sand sharks and an Englishman's sense of humor. Four years as the Course director. A recent visit to Old Main.

The scientific fish story of those days at Woods Hole was that concerning the tilefish. So far as known from the Fish Commission records this fish was discovered in 1879 by Captain Kirby of Gloucester, in Command of the schooner William V. Hutchins, while fishing near the hundred-fathom curve south of Nantucket. The U.S. National Museum identified these fish as a new genius and species. Since its food quality seemed to be excellent the Fish Commission was much interested and did all it could to exploit the find which seemed so numerous that it might become the principal fish brought to the New York and Boston markets.

But disaster struck in March and April 1882 when vessels entering our North Atlantic ports reported countless dead tile fish floating in an area from the Georges banks to Cape May. A conservative estimate made by Capt., J. W. Collins of the Grampus placed the number of dead fish at upwards of 1,438,720,000.

Allowing ten pounds for each fish, he estimated this amounted to 288 pounds for every man, woman and child in the United States at that time. The mystery of the death angel of the tile fish has never been explained, although the most plausible explanation seems to be a sudden chilling of the deeper water along this stretch of the continental shelf.

No catch of tile fish was again reported until 1897, according to Fisheries reports that I have examined. In February of that year 30 tile fish were reported caught from the schooner Mabel Kensington about 140 miles southwest of No Man's Land, thus confirming the belief of biologists that the species was not completely extinct and would eventually reappear. Among those who had felt that the tiles would some day come back was Dr. H. C. Bumpus.

The Grampus under full sail

Leaving the Fish Commission dock at Woods Hole for a collecting trip in the Gulf Stream.

In the summer of 1898 Bumpus, who was one of my best friends among the older men at Woods Hole, thought there should be a good chance to find tile fish by trawling near the continental shelf south of Gay Head. Having the Grampus at his disposal he planned a trip to the shelf in August of that year. I was fortunate in making that trip as a sailor before the mast. In addition to the crew and Dr. Bumpus several biologists went along, sleeping in the cabin quarters provided for such guests.

We left Woods Hole on an afternoon toward the end of a heavy southwest blow which promised better weather for the days following. We were past Gay Head by dusk and driving into the heavy swells of the dying storm. I went off duty at eight bells that night and thought to turn in for plenty of rest before what I hoped would be the day of days that it was. In the forecastle I found the air foul enough without the stench of a smoking kerosene lantern, and of course there was more motion there than anywhere else on the vessel. After a half hour of this I knew I'd be seasick if I stayed there much longer so I got back into my oil skins and went on deck. Being sure that it was the air, not the motion, that had

bothered me I went forward by the bowsprit and stretched out on the deck beside it where about every third wave sent the spray over me as we drove on through the night. The threat of seasickness disappeared, and I stayed there until midnight enjoying every minute of it. Then, instead of returning to the forecastle, I found a place in one of the dories nested on deck.

scientists, as it happened, being all too sick to hold up their heads, I tried to do some collecting for them as well as for myself. Since he was a good sailor, Bumpus was at his best. He had the men get the trawl overboard, and Bang! — the first time we brought it up there were a half dozen or so of the long lost tile fish. I believe we put the trawl overboard once or

fishermen and be good publicity for the Fish Commission. He called for two volunteers from the seamen to row him and his fish to Woods Hole instead of waiting to drift home with the next tide. I volunteered as one of these oarsmen. It was a tough pull in a big dory with Bumpus, his fish, and, as I recall it, one of the scientists; but we made good time and the fish got their

Returning From An Oldtime Collecting Trip

First collecting trips were made in small boats, then a large ship's boat was added. Next the original Sagitta towed the boats. In background is Woods Hole waterfront of the 90s.

There I made myself comfortable with some old sailcloth and slept the sleep of youth until I was called for my next watch at four o'clock.

During this watch I was astern by the wheel and the sailor in charge let me steer her under his supervision. As dawn came, we could see that the waves were still running high, two or three times the length of the Grampus. First we were going down hill at what seemed to me a forty-five degree angle, then there was a horizontal moment before the deck seemed to rise up as though it might hit me in the face. That was my most thrilling experience under sail.

When we reached the Gulf Stream about noon I got my tow nets overboard and began dipping up tufts of Sargasso weed as they drifted by. The guest

twice more before Bumpus decided that we should head for home with our prizes well packed in the ice he had brought along.

As the wind was light, we did not reach Gay Head until the next morning. There we lay at anchor all day in a dead calm. It was fiercely hot and not even swimming was much fun because the tide ran so fast one could hardly swim against it. Late in the afternoon we drifted up Sound with the tide and had enough wind to make an anchorage at Tarpaulin Cove.

By the next morning Bumpus was getting fidgety, for he wanted to ship some of his tile fish to New York to have them on exhibition at the fish markets and to have them featured at some leading restaurant. This would stimulate interest by the

publicity without further delay.

In the summer of 1901 I went to Beaufort, N.C., with several of my fellow graduate students at Johns Hopkins University. Prof. W. K. Brooks, my teacher at the Hopkins, came down later in the season.

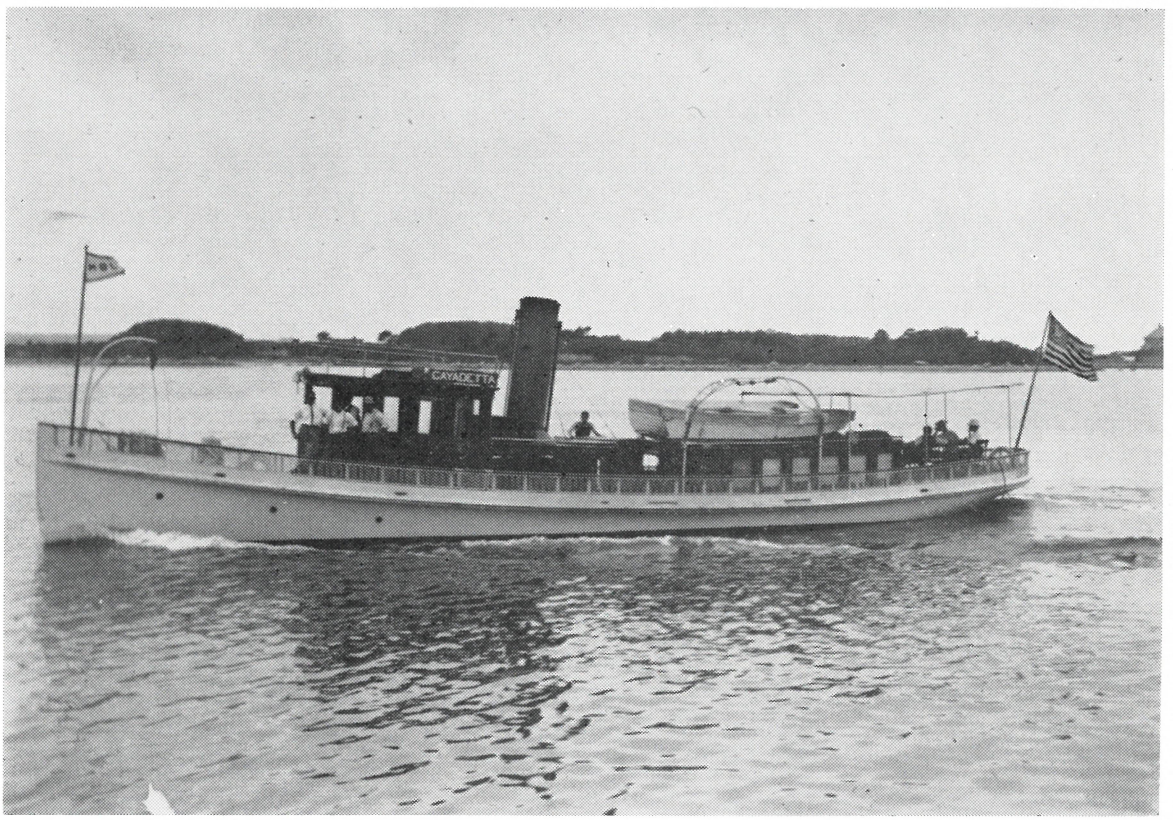
Unfortunately, my summer was cut short in August by an attack of dysentery. In September I headed west to my job as an instructor in zoology at the University of Missouri.

Although I had resolved not to teach in the summer but have my time for research, I went back to the Invertebrate Course in 1902 and '03. I needed the money. Prof. Gilman A. Drew of the University of Maine was then in charge. Later, he became resident director of the Laboratory. I had known Drew at the Hopkins. He was a re-

markable man. Crippled in one leg when a child, I presume by polio, he walked with a crutch but this was no overpowering handicap for a man of his determination. His crutch was better than the second leg of most men. As a boy he had played the kicking game of football that was then in vogue. He rode a bicycle of the old ratchet type that had a brief existence in the nineties. He could jump a fence that was armpit high by using his crutch as a vaulter would use his pole. With a leather disk attatched to the base of his crutch he could go about the flats and dig for worms in three feet of water with the best of us. From his legs up he was built like a bull, and his good leg was as good as any two in the laboratory. How he did make things go, although he did this by main strength and awkwardness as he stumped about. The rest of us being younger and of lighter disposition at times conspired to bait him and see him explode when he had taken the hook. On Drew's staff with me these two summers were: McGregor of Columbia, who later made the well-known busts of early man, Tennant of Bryn Mawr, Budington of Oberlin, and Hall of Lehigh. I've always maintained, although not the one to say it — that Drew's staff in 1902 and 03 was, pro rata, the best one the Invertebrate Zoology Course ever had.

Mrs. Drew was like her man, a big, strong woman and a driver on work. They both had their prejudices, notably those against tobacco, liquor, and Southerners. How the fur did fly when Drew was a student at the Hopkins and began arguing with George Lefevre, who was a fellow student and came from Baltimore. Both Drew and his lady were products of the Iowa farm belt. Although I liked and admired them intensely, I am always reminded of them when I see Grant Wood's picture, "Iowa Gothic."

For the summer of 1904 I held a three months appointment as a scientific assistant working independently in the Fish Commission Laboratory at Woods Hole. The stipend was $75 per month plus a room in the laboratory and sleeping quarters in the residence. My bedroom was on the third floor facing the harbor —better than any room I ever had in Woods Hole before or since, but very damp of foggy mornings. The days of a Fish Commission Mess for the investigators were over so I boarded at the M.B.L. Mess as in previous years. Being a Fish Commission man I had an even greater run of the Commission boats than I had had in previous summers through my personal contacts. The justification for this expenditure of federal funds was my current interest in fish parasites. Along with my worms in the laboratory I had numerous specimens of their suspected host, the sand shark, confined in floating crates in the outer basin of the Commission wharf. These I "expurgated" with the oil of male fern, infected with



Converted Yacht Cayadetta

Off for a collecting trip for the Supply Department.

the parasites in an early stage, and fed as seemed necessary. A three or four-foot sand shark is something to handle. I soon found it had to be a one-man job. I could never be sure that the other fellow would not let go. The holder I devised as an "operating table" and my antics in getting a shark into this, ramming something down his throat and then getting him safely back to captivity, were such that I was often annoyed by the audience of summer visitors who waited on the wharf to see the show.

An Old Staff Picture

Dr. Curtis sits in center in light suit and spectacles. He is flanked in front by McGregor and Hall; behind, left to right, are Tennant, Director Drew, and Budington. Dr. Curtis writes: "I've always maintained, although not the one to say it—that Drew's staff in 1903 and '04 was, pro rata, the best one the Invertebrate Course ever had."

During the summer of 1905 I was kept in Missouri by the advent in June of "My son Bill."

In 1907, having just moved into a house, and needing the money, I taught in the Summer Session at the University of Missouri.

My salvation for this summer was my trip east in August to attend the International Zoological Congress held for a week in Boston. This was followed by several days at Woods Hole and then by a week in New York City where there was a junket each day to some place of interest. Those I remember particularly are: the trip to the Cold Spring Harbor Laboratory, and the one up the Hudson when Henry Fairfield Osborn hired a full-sized excursion steamer and took us all up river for lunch at his country residence, a castle-like establishment overlooking the River in the Highlands.

I had spent some days in Woods Hole before going up to Boston. William Bateson, the English geneticist was there in advance of the Congress. He charmed us all by his personality and diversified interests. Lefevre and I sat at the table with him at the Dexter House, a hotel near Little Harbor that is now gone. When in the United States years before, Bateson had known and admired our teacher Professor Brooks so we had a certain entree. Much interested in comparing the English with the American sense of humor, he was delighted by the following story.

An Englishman in an American restaurant had set before him a dark colored fluid in a cup as the first course. As it looked rather unappetizing, he called to the waiter, saying, "And what is this, my good man?" "That, Sir" said the waiter, "is bean soup," To this the Englishman replied, "I don't care what it has been. I want to know what it is now."

While I was at Woods Hole, the Director of the Laboratory called me to his office and offered me the directorship of the Invertebrate Course beginning in 1908. I thought it over with care because I would have preferred to have my summers free for research, but the call of the M.B.L. was always "the call of the blood" for me. Then too, I needed the money.

Assuming charge of the Course in 1908, I found the equipment vastly improved. Drew had stormed around until he got what was most needed and had it all well organized. Best of all there was a steamer the Cayadetta, another second - hand yacht, bought and presented to the Laboratory by Charles R. Crane, the godfather of the M.B.L. in those years. This boat was large enough to take the entire class with its instructors and have besides a few places for guests. She had, as the law required for a steamer of that capacity, a captain, an engineer, a fireman and two deck hands. There was deck space forward with a powered capstan — no more hauling the dredge and tangle by hand. There was comfortable deck space astern with an awning. The Vigilant was gone but she was still a poignant memory.

These summers were harder work for me and hence not so much fun. With Lefevre, I was

completing the investigation of the freshwater mussels that I had begun at the Hopkins and my heart was in this research, though my New England conscience did not allow me to neglect the course. Looking back upon these summers I find the more notable memories are my contacts with students and the life long friendships that resulted, for example, with Lewis Gannett, Ruth Howland, and Ernest Just. From those on my staff, A. S. Pearse and G. S. Dodds came to be numbered with my half dozen closest friends.

When I took charge, I thought of keeping the appointment for five summers if I was wanted that long; in 1911, at the end of the fourth summer, I found myself tired out, stale on the whole thing, and above all, wanting to see if I could not rehabilitate my research career by being my own man in the summer time. Moreover, I dreamed of writing a textbook on Invertebrates. So I resigned. Since then, when I go through the old laboratory room now and again in summer I "dream of the days that are gone, Maggie."

Once when I did this in 1946 the class was away on a trip and only the technician was left behind. Thinking that I was a stranger, she showed me over the first floor of Old Main, explaining how the Course was conducted and the other rooms used. By the blackboard hung a chart I had made. In the room that was our lecture room in 1896 we passed the filled-in hole in the floor that I used to feel for with my feet in the dark. When the tour was over I confessed my past connections. My technician girl began to laugh. "You know," she said, "I heard two of the girls talking in the laboratory before they left for the trip. One of them said, 'And last night I met W. C. Curtis,' At which the other exclaimed, 'Not the original W. C. Curtis! Why I thought he was dead long ago.' " By 1946, my son Bill was the Curtis better known to the younger generation.

For all that, I still walk through the Invertebrate room once each summer, stopping at the seat I occupied in 1896, to ask the student sitting there if it is a satisfactory place to work. After the student has admitted it is, I tell him or her that I found it so in 1896, and let him discover the rest if interested.

It has been nice to write of the old days when one lives so much in the past and the romance of memory calls one back. If you ask me, "How can I remember all these things", I reply, "It is because I cannot forget them."

Rhymes of the Woods Hole Shores

by

Winterton C. Curtis

Only a few of my friends know that my undergraduate excursions into the realm of verse continued beyond my college days. In my years of greatest stress I found emotional relief in trying to put down what appealed to me in nature or to express some measure of my inner depths. And always there have been nonsense rhymes for friends, and particularly for children. Of late years the children have had the best of my efforts.

So, to conclude my tale, I have dug from my memory a random sampling from the days when I "trod the ling like a buck in spring and stood like a lance at rest."

Some of these rhymings were quite personal when they were written, but such things become surprisingly impersonal with the lapse of years.

Horizons

Beyond the line where the sky goes down
Where late the clippers sailed,
Roman and Greek and Phoenician bold,
Norseman and Portuguese,
Trader and sailor and fighting man
Dared the wrath of the sea.

They bartered and fought,
They loved and stole,
Brought their booty home,
Chafed again at their firesides
Dreaming of days agone,
Of Northern Lights that come o'nights,
The humming trade wind's song,
Decks awash and the spouting reef,
Of isles where pirates hide, —
Nor child nor bride could hold in leash
Against that call of the sea.

Later, they conquered by steam and steel
And the white man's world today
Was won by the men who heard that call
And steered for the open sea.

However, the "white man's world" of 1955 is very different from what it seemed in 1900.

To My Mechanist

So you are compounded of protein stuff,
Carbohydrates and other things too,
Of lipoids and fats and just this and that
In a physico-chemical stew;
And the light in your eyes a refraction effect,
Your words incidentally due
To mechanical workins and quirkins and
jerkins
Reduced to a principal few:

In your mechanist creed,
Is there never a need
For anything that explains you,
As you pick 'em and choose 'em
And otherwise use 'em
To sift out the false from the true?

'Tis not a bad creed,
Perhaps all that we need,
But thinking the whole matter thru,
The question that hits at my moth-eaten wits
Is that nice little thing
I call "You".

Waves

In changing moods they fall upon
The jagged shores
Or on the beaches sandy breasts.

Today, I saw some funny little waves
Come tumbling home in whimsical array
Each laughing as it came to meet its death.
And there are other waves that come
Like lions leaping at their prey,
And others still with sullen force
As though by deep resentment pressed,
And booming waves
That fling themselves upon the sands
And glorious melt away.

But I like best the little twilight waves
That tinkle on a shingly beach
And still are heard as night draws in
Calling from out the dark
With soft imaginings.

Afterglow

A silhouette of pines
Against a crimson sky,
Across the inlet's face
A burnished path
Of reddish gold
Purpling to left and right
Along the shores,

A last lone gull
That idles by
As though already
Half at rest,
An old moon by the new entwined
And by its side a star.

I watch the fading afterglow,
The path of gold that dims,
The bright'ning moon and star,—
Dreaming old dreams and new.

Understanding

Low-lying shores that reach
Along the bay to where
The land hangs from the sky
In strange mirage,
A sailboat tacking idly to and fro,
Nearby the jumbled boulders
Interspersed with sands,
The magic of the sunlight
Where we watched with close-clasped hands.

Sou'west Blow

Leaping they come in jagged ranks,
White-capped as ever and anon
They overtop themselves
Only to gather strength again
And still advance,
Driven they know not how or where.
Until at length they reach the shore
Where broken still they strive,
Stretching along the sands
With dying strength,
To win the fancied goal.
"Waves, waves," you say,
"And are we more than these?"

Sunset

To be a part of beauty
Such as these:
Cloud piled on cloud,
The depths beyond,
The crested waves
Against a rocky shore,
Mists in the morningtide,
The sunset's gloried hues,
Falling upon the earth as rain
And flowing toward the sea,
E'en though within some murky flood
Or in some vile polluted fen
To linger by the way.
And then, to be again
A part of beauty such as these, —
Free from the slaving circumstance of life.

Fishing Terns

In hurrying flight
The frightened school
Flees here and there,
Never at rest,
Now crowding close,
Now spreading wide
Or leaping high in terror
To escape the death below.
Perchance they pause,
Secure a moment's space
In seeming peace.

Then like an arrow swift
Descends the winged bolt,
To sieze and bear away
Another wriggling victim
By the gods decreed.

Moonlight

The flood-tide eddies
Gurgling 'neath the pier,
A phantom sail
Slips through the filmy haze,
The moon, cloud-hidden,
Dims a moment's span
And wraithlike mists arise.

Then o'er the water
Stretches forth once more
That silver path I tread in dreams,
Leading me ever toward the skies
With you beside me
On to Paradise.

M. B. L. Roof

Communion with the sea and sky
Exalts in me each high emprise
That struggles to be free
Above the mire of my lesser thoughts.
The passing clouds,
The water's restless face
Changing and yet unchanged
Along the ragged shores,
Call to me here,
As from the heights
I look on life apart
Scorning the ways of men.

In conclusion, I'm shocked to find that there are students in the Invertebrate classes today who don't know the names of the Elizabeth Islands, as was required in my day:

> "Uncatena and Weepecket
> Great Naushon and Nonamesset
> Nashawena, Pasquenese,
> Cuttyhunk and Penikese."

And the student could not pass until he could reverse the jingle:

"Cuttyhunk and Penikese — — and so on.