

GEORGE J. STREATOR'S CRUISE OF THE THOMAS SAY IN 1885

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In September of 1885 George J. Streator, nurseryman and amateur naturalist of Garrettsville, Ohio, and his friend, S. M. Luther, druggist and also an amateur naturalist, made a collecting trip down the Mahoning River and into the Ohio River on a flat-boat named the Thomas Say. Streator's diary of this excursion has come to light, and excerpts from it have been edited to give modern students an account of this collecting trip made 76 years ago. My thanks are given to Sydney V. Streator, son of George J. Streator, for loan of the diary and for encouragement in making this study.

George Streator was born in Manistee County, Michigan, in 1845. In 1870 he moved to Portage County, Ohio, and settled near Garrettsville. Here he established a nursery and greenhouse and became a specialist in plant breeding. His hobby was the collection of land and freshwater shells.

Streator accumulated a large collection of shells both from his own field work and by exchange with other collectors. His friends, George W. Dean of Kent, who was also a nurseryman and an amateur conchologist, and S. M. Luther, likewise made collections of local shells. Streator was handy with tools. He constructed the cabinets and boxes in which his shell collection was housed. He also built the

Thomas Say. Streator's collection was eventually given to Stanford University. His brother, Clark P. Streator, was a professional collector for the Smithsonian Institution. Realizing the professional value of his brother's collection, Clark suggested that it be given to Stanford University to make it available to conchologists and to preserve it for future reference.

The only publication of George Streator was a note "Bythinia tentaculata Linn. in Ohio" published in the NAUTILUS in 1899. A finger-nail clam Pisidium streatori was named in his honor by Victor Sterki. In 1904 Streator moved to Santa Cruz, California, where he continued his work in plant breeding in which he was very successful. However, while he joined an informal group of naturalists known as "The Congenials," he apparently did not continue his collection of shells. He died in 1925 at the age of 79.

Shortly before the cruise of the Thomas Say, Streator made a visit to Grand Rapids, Michigan, primarily to attend the meeting of the American Pomological Society. While there he called on Dr. DeCamp. Together they collected mollusks in nearby habitats, and Dr. DeCamp gave Streator many duplicate shells from his large collection. (Dr.

DeCamp is remembered by many species named for him in the following genera: *Fossaria*, *Gaiba*, *Lymnaea*, *Melantho*, *Campeloma*, *Goniobasis*, and *Succinea*. Some of these are now recognized as subspecies).

The Thomas Say was a home-made flat-boat which was 12 feet long and 4 feet wide. It was square ended and was propelled by two sets of paddles, a long pair and a short pair. For camping the boat was inverted on the shore, propped up on one end by the short paddles to provide cover for the night. This boat was especially constructed for a collecting trip down the Mahoning River and into the Ohio River as far as Yellow Creek. Following are selected excerpts, edited somewhat, which give us a picture of this excursion by two amateur naturalists, the conditions under which they lived and worked, their experiences and observations on the trip, and some of the mollusks they collected.

From Streator's Diary -
"Cruise of the Thomas Say, 1885"

"Sept. 16, 1885. Starting from Garrettsville, Ohio, at 8:10 A.M., we reached Youngstown at 10:15 A.M. Here S. M. bought a pair of blankets and I a hatchet. We were well served by an old expressman in getting our boat, trunk, and fixtures to the river. We launched here and started on our downward journey at precisely 9 minutes to 11:00. The Thomas Say promises to be all we expected. Not a drop of water poured through her seams. The river is not extremely low - enough water so we passed easily over the rapids. The Willows, Sycamores, and White Maples stand in beautiful contrast along the banks. Goldenrod, Eupatorium, and Aster are in their fullest perfection. We went down one mile below Haselton. Here we found *Physa*, *Melantho decisa*, *Goniobasis*, *Pisidium*, *Planorbis trivolvis*, and dead *Unio luteolus*, etc. The scoop worked well. At 15 minutes to 5:00 P.M. we reached Struthers. Above this we landed and found *Zonites inornata*, *Z. fuliginosa*, *Hyalina ligera*, *H. multidentata*, *Helix tridentata* and a single *H.*

thyroides. We made a run to an island one-half mile above Lowellville where we camped.

"Sept. 17. We left camp Rhus, so called on account of the great abundance of *Rhus toxicodendron*, at 6:25. Fog was thick. Without incidence we reached Lowellville Dam 22 minutes to eight. Here we successfully transferred the Thomas Say from the higher to a lower level. We made a run past Heilville (?), Pa., although we did not see the town. A mile below we stopped and took dinner, but before this we stopped and looked for *Helices*. I found a number of *Zonites inornata*, *H. tridentata*, *H. albolabris*, and *H. thyroides*. We reached Edinburgh dam at 1:30. Here we transferred our boat to a lower level. We looked in the rapids for *Unios*. Live ones were not plentiful. Found *Quadrula coccinea*, *Q. rubiginosa*, *Clavus triangularis*, *Unio phaseolus*, *U. gibbosus*, *U. luteolus*, *U. circulus*, *U. subrotunda*, *Q. cylindrica*, *Margaritana rugosa*, and *M. marginata*. A flock of geese persisted in swimming ahead of us. We got interested and it fairly tired one out. Stopped and found a few *Zonites inornata*, and I found a *Helix profunda*. Here we filled our jug with water. After making a run of a rapids S. M. hooked a fine black bass but did not land it. After trying about sundown to find a place to camp we pulled ashore at the head of a rapids and where the river had a current.

"Sept. 18. Camp Dean. We arose at 4:45 A.M. At 5:55 A.M. we left camp and picked up a few *Unios* on the bar. *U. triangularis*, *U. luteolus*, and common species. Fog was not so dense as yesterday. We reached the mouth of the Beaver at 9:15. About 1.5 miles below this place we found on the south bank *Hyalina multidentata* and *Zonites inornata*. At Irish Ripples we had to get out and tow the boat to get safely over the ripples formed by

an old dam. We passed Buck Point, a picturesque watering place, about 5:00 P.M. This place is on the Conoquenessing River which flows into the Beaver. A mile below was what seemed to be remains of an old iron furnace. We ran at least two miles below Buck Point in order to find a suitable camping ground. We camped on a pile of small stones and boulders on the left bank. A good supper of eggs and coffee, bread and butter restored our energies. We were happy to rest ourselves in the Thomas Say at Camp Luther.

"Sept. 19. Left Camp Luther 5:30. Stopped on a bar a few minutes before dawn. Passed Mayland 6:20; we pulled through to Beaver Falls. Here found it hard to make a transfer to the Ohio River by wagon, which we did. There were three dams to run and several rapids making it tedious at best. Beaver Falls is the seat of a large manufacturing industry. We were in the water of the Ohio at the mouth of Beaver at 11:30, (lost my paddle coming from Beaver Falls). Crossed the river and took lunch on the opposite side. Here the Ohio is spanned by a lofty railroad bridge. On the opposite side above the locks are a number of stern wheel steamers, and a number of coal barges. The river is smooth, six feet of water in the channel, on the left bank of the river going down. At this place is a shale full of concretions. Above the place where I landed I found a fine plant of *Aristolochia siphon*. The first time I ever saw it wild. I collected a number of the seed capsules. We climbed the cliff after dinner and I found *Macrocyclus concava*, *Zonites subplana*, *Helix tridentata*. We then made a run down the river of a couple of miles. S.M. remained in the boat and I worked the hillside. I found *Helix profunda*, *H. palliata*, *H. tridentata*, *M. concava*, *Z. subplana*, and a small variety with elevated spire, which we did not know. Also *H. hirsuta*. Then we made a run eight miles from the Beaver and camped at the foot of a tall cliff, whose lower strata were limestone in which we saw imbedded crinoid stems and other fossils. At the extreme foot of the cliff large blocks of stone lay. The beach slopes

sharply to the water's edge. Here shored up on the lower end stands the Thomas Say in all her glory. We found a few *Pleurocera* at Camp Crinoid; have seen no *Melanthos* on the Ohio River above Wellsville. Luther found *Zonites inornata* on the cliff above Camp Crinoid. Mountain Laurel was found at that place. The evening is delightful, the katydids are a fall charm and the piping of an occasional cricket only adds as a variety. The air is and warm, the sky is blue and is filled with a soft radiance from the rising moon. The sounds of night are pleasant, the drum of a distant band, the barking of dogs, and the gentle ripple of the beautiful river, the Ohio.

"Sept. 20. Left Camp Crinoid at 8:15. Before leaving we searched the hill for *Helix*. Found a number of *Zonites inornata*, *Helix palliata*, and *Helix* sp. We made a pull down the river past Shippensport and farther down, Industry. Below this latter place we stopped on the left channel (this divides to make an island). We stopped and collected *Helices*. I found a new species there which S.M. did not know. Also, *Z. fuliginosa*, *Helix tridentata*, and *Zonites inornata*. A good number of the *Helices*. The current was swift below the island for a considerable distance -- a mile and one-half perhaps. We took dinner, did not stop long, passed Smith's Ferry and Georgetown. Below this place, passed a steam packet. We were in sight of Liverpool and its pottery long before we reached it. A long, weary pull. Just at the lower edge of the town we passed another packet. We intended to camp early but the place was so forbidding that we made a run opposite Wellsville. Not a very good place compared with our last camp. The river cliffs are very high, as much as 260 feet in the highest places and so steep that it would be difficult to climb them but for the trees which cover nearly all but the bare rocks. Luxuriant climbers, prominent among which is the *Aristolochia siphon* and *Asarum virginiana*, make the site a beautiful

one. The river bends are generally rather long, and the receding sights and the promising sights, not quite yet plainly in view, make it continually interesting.

"Sept. 21. West Virginia. We left camp Wellsville at 6:45 crossing the river obliquely in the fog. Last night I wrote a card in company with S.M. to George W. Dean and a letter to the folks at home. At Wellsville, S. M. went ashore to post letters and get supplies, and to find out as to whether we can get our boat on the cars at Yellow Creek, Ohio. A steam packet presents a much different appearance going down than pushing up with fiat boats and coal barges. While waiting at Wellsville, I saw the first one pass down on Sept. 21. We crossed down the river and to the West Virginia side; climbed the cliff in search of Helices. Found *Z. inornata*, *H. tridentata*, *H. profunda*, and *Z. fuliginosa*. The hill was rather dry for good work. Wellsville is situated more pleasantly than any other town we have passed. Passing down we crossed an artificial bar made to narrow the channel. At this point Yellow Creek is in sight. Here the Ohio curves round the bluff as it goes down the Yellow Creek Valley. We pulled below and across to a split in the rock wall of the Ohio. A small stream of water trickles out through a seam. We filled our jug. Passing an odorous carcass of a dead horse, floating in the stream, found a place where *Unios*, for the first time, were somewhat abundant. Here we took dinner and here we found a great abundance of beautiful little univalves *Somatogyrus integer*. We collected a large number of them. I found an abandoned work of a muskrat in a hollow log and I selected from his den and along the willows and the shore good dead shells of *Unio crassidens*, *U. ligamentinus*, etc.

Nothing but what we found last season. The stream is 18 inches to 2 feet higher than then, so the bar is covered and work with the dredge does

not succeed. I climbed the high hill down the river from Yellow Creek. Part way up I found a grove of Paw Paws. Few of the ripened fruit lay on the ground. They were good; shaking the trees I succeeded in getting a number to carry home to the children. I found many dead *Helix* on the steep hillside, but the sheep had trodden the ground and so generally the number of live specimens I found were small ones of the same species as we found before. Reaching the top of the hill, I saw the country as a map -- below lay the beautiful river Ohio, its rapids and islands. Moving up the stream within one-half mile of Yellow Creek we camped on the stony beach of the river and under the over-hanging rocks. The view across is fine and the beaches generally second only to Camp Crinoid. S.M.L. has pleased to call this our last camping place on the Ohio for we have concluded to go home tomorrow. This place we called Camp Streator.

"Sept. 22. I arose at 3:00, built a roaring fire and wrote this note. After breakfast we picked up our plunder putting one basket in the boat, taking one with us, and the remainder in the trunk. We took a final cup, shook hands over the fire, bid Camp Streator goodbye, and pulled for Yellow Creek. S.M.L. gave his jug and lantern to some men to help us carry the Thomas Say to the station. We shipped it to Ravenna. While waiting for the train I went out on the hillside and found 4 proud and shining *Z. inornata* and a couple of *H. concava*. The train was late and we reached Ravenna about noon."

Thus ended the cruise of the Thomas Say. Streator returned to his nursery and Luther to his pharmacy, but this collecting trip remained as one of the highlights in the memory of these amateur conchologists.

ERRATA

Page 41, left hand column, paragraph 2, line 7, for *tedi*, read *tedious*.

Page 41, right hand column, line 11, after "The air is" add "soft".