

A Short History of *Liguus* Collecting

with a List of Collectors — 1744 to 1958

By RALPH H. HUMES

Of all the land snails found around the world, few excel the genus *Liguus* in color, beauty of design and architectural perfection. These attractions have inspired hundreds of collectors to search for these beautifully colored creatures since they were described by Müller and others in the eighteenth century—over 200 years ago.

The early describers, Müller (1774), Montfort (1810), apparently did no collecting, Peale and Say (1825), were naturalists as well as scientists. They did not confine their activities to a single field but were interested in the entire fauna and flora of every area they studied.

The classification of land mollusca had barely begun when Müller began his study of land shells. Nearly every unfamiliar shell he encountered was a new species or genus waiting for someone to describe it. Imagine the thrill and excitement these early collectors and scientists must have experienced on landing upon a sandy beach of some unknown Florida Key and wandering into a lush, cool hammock and there, for the first time, finding the multicolored, conical, tree-climbing snails which we now call *Liguus*; glistening everywhere from the trunks and branches of trees!

One can imagine the thrill, the excitement of the hunt, which drives the contemporary "snailer" from his bed at four o'clock in the morning to return home hours after the sun has set. This thrill must certainly have inspired the early collectors, too. Only the intense love of nature and the out-of-doors, coupled with the excitement and anticipation of a rare "find" or the wonderful fellowship experienced on a snailing trip could entice the snailer to endure the hardships and risk the hazards which confronted him on every snailing excursion. For what other reasons would men or women endure mosquitoes, horseflies, deerflies, ticks, redbugs, bees, wasps, scorpions, centipedes, fire ants, poison ivy and poisonwood, and subject themselves to the ever-present

dangers of poisonous snakes, potholes and alligators, the female of which will charge with a bellow if one wanders too close to her nest.

Up to the turn of the present century, very little was known about Florida tree snails, although Montfort, Peale and Say knew of Cuban *Liguus*, as that island is fertile ground for all types of land mollusks, the home of some 4,000 species of land snails. Early in the 1800's British sailors hunting for fresh meat and water along the Florida Keys found *Liguus*. Some of the specimens taken by these early collectors found their way into British Museums, where they are still on display.

Three men: Simpson, Pilsbry, and Clench, stand out as the giants of authority on Florida's tree snails, *Ligus fasciatus*.

Charles Torrey Simpson, an all-around naturalist, collected his first *Liguus* in 1882. Simpson wrote in *Lower Florida Wilds, 1920*, "Out of Doors in Florida", "Florida Wild Life", "Ornamental Gardening on South Florida", etc. Pilsbry called his Florida's first naturalist and the father of Florida *Liguus*. Simpson described and named 19 color forms in the "Proceedings of the U. S. National Museum", 1929, where he was an associate. With more than 30 years in the field, acquiring a fine collection, he certainly knew a great deal about them. The collection was given to the University of Miami where some of his types may still be seen. This man of sturdy legs walked the railroad tracks to Key West—180 miles—riding the train only where there were no snail hammocks in sight. He also did much hiking and collecting in Long Pine Key, not only for shells but plants as well. Charles Mosier, well known naturalist, and John K. Small, the famous botanist, were often his companions on collecting and exploring trips.

In the days of the horse and the Model T Ford, Simpson rode to Flamingo in a charcoal wagon intent on collecting shells. Instead, with the help of an old negro charcoal burner who lived alone in the area, he brought back a load of orchids and planted some on his trees along Biscayne Bay; (*Oncidium luridum*).

Dr. Henry A. Pilsbry's monograph on *Liguus* in "Land Mollusca of North America", 1946, cites at least 16 forms he described. During his long tenure at the Academy of Natural Sciences in Philadelphia, Pilsbry was known as

the Dean of American malacology. He began his work on *Liguus* about 1899, and in 50 years amassed a collection of more than 20,000 specimens.

Dr. Pilsbry was my companion on several glade buggy trips. At each stop, stretching out on the ground, he would rest. Some times fingering or scratching for tiny shells on the surface of the ground, or dozing off for a few seconds. It took only a few minutes and he was ready to go again which seemed remarkable since, at the time, he was in his eighties.

Dr. William J. Clench, curator of mollusks at the Museum of Comparative Zoology, Harvard, Cambridge, Mass., described some seven or more Florida *Liguus* color forms as well as a good number of Cuban types. Dr. Clench said he had 30,000 *Liguus* specimens to draw from for his "Reclassification of Florida *Liguus*", 1939. Clench has been a student of *Liguus* for many years and is the only living member of the big three.

He and his associates were the first to draw a map to scale of the Long Pine Key area, beginning near the entrance of Everglades National Park. W. S. Schevill drew the first walking map of Long Pine Key; Clench improved on this map tremendously. Besides giving the hammocks numbers, he was also the first to name these hammocks in honor of his associates, contemporaries and collectors of the time.

Dr. Frank Craighead, Ralph Humes, Richard Deckert, Archie Jones, Captain C. C. von Paulsen and C. N. Grimshawe, along with others, continued this practice, numbering and naming many more hammocks with the help of aerial maps provided by the naturalists department of Everglades National Park. Dr. Craighead has spent an enormous amount of time interpreting and correcting these maps.

Charles Mosier was a fine naturalist and friend of Simpson. He collected mostly in the Long Pine Key area. For a while he was superintendent of Royal Palm State Park which is now a part of the Everglades National Park, and lived there in the old Lodge. This wooden structure was a landmark for years, and the meeting place of naturalists from all over the world. The dilapidated old structure was finally torn down by the Park Service. Mosier had a fine collection of *Liguus* and enjoyed giving many shells away. Eventually the collection was offered for sale and can be seen at the Beal-Maltbe Museum, Winter Park, Florida.

Another collector who has described color forms of *Liguus* is Henry Frampton, owner of a biological supply house in Miami. Naming several fine varieties, he had a few more in manuscript (names accepted and in common use) which was published by Margaret Doe in *Nature Magazine*, citing figures and plates with names. Since this complied with the rules of nomenclature, she was inadvertently credited with naming these color forms: *gloriasylvatica*, *violafumosus*, *nebulosus* and *lucidovarius*. Later Dr. Clench straightened out the figures, numbering the plates and text to stop further confusion as to authenticity.

Dr. deBoe named "*L. f. solisocassis*." The description was actually written by Richard Deckert, an old-time herpetologist and fine shell collector. Deckert also helped Pflueger describe his "*L. F. doheryti*" from Lower Matecumbe Key. Ralph Humes authored "*L. f. wintei*", a color form found by Erwin Winte, an Everglades National Park Ranger.

Frank Young, a professor at the University of Indiana, recently named "*L. f. von paulseni*" in honor of Capt. C. C. Von Paulsen, U. S. Coast Guard Ret., who found the new race on Middle Torch Key. Young also rediscovered "*Liguus fasciatus pictus*" on Big Pine Key. This shell was thought to be extinct since 1912, and was not found in the newer collections. Frank was brought up in south Florida and has written many useful papers on *Liguus*. He is also an authority on "Lig" localities.

J. N. Farnum was one of the first to collect in the interior of the lower Everglades around Pinecrest, 50 miles west of Miami. Working out of state road headquarters at 40 Mile Bend during construction of the Tamiami Trail, he numbered his hammocks and drew a map of their locations as Dr. Clench had done in the Long Pine Key area. He found many new forms which were later named by Dr. Clench and Margaret F. Doe. The Museum of Comparative Zoology at Harvard bought two fine collections from him.

The "Lig" country stretches from Pompano Beach across the state to Marco and down to Key West. It is a large area divided into sections by snailers and hunters. These geographical areas are abbreviated as follows: C. P. "Central Plains", a new area seven miles south of the Loop Road, named by Humes and Jones, it is the buffer area between (Pine Crest) and L.P.K., (Long Pine Key); L.P.K. located west of Florida City, now in the Everglades National Park; and, C.C. for "Collier County". Other shell localities carry

the descriptive names given them by the discoverer. Grimshawe named a hammock north of the trail Meon for "My own", others were "Pants" hammock, the "Iron Pot", "Bloodhound", "Horsefly", and so on.

The total number of hammocks in south Florida has never been counted accurately. The estimate would probably run to almost a thousand. There are about 400 within the boundaries of Everglades National Park. Fire and storm have destroyed a large number of small hammocks.

Before the drainage canals were dug in the early 1900's, new hammocks were not forming because the water table was higher which made the land unsuitable for hammock growth. Dry areas of today are producing young islands of growth which in time will become typical hammocks. There is some danger of Australian pine and mellalucca taking over large sections of the open glades.

Before the drainage of the Everglades, it was not uncommon for adventurers to start at the Mouth of Miami River using canoes or Indian dugouts, poling to the headwaters, then across the glades to Ft. Myers, down to Cape Sable and over Florida Bay to Biscayne Bay and back again to Miami. In those days it was easy to collect shells along the perimeter of south Florida by boat. The large hammock areas in the central Everglades were not known before the Tamiami Trail was cut through the Everglades.

With the publication of Simpson's and Pilsbry's manuscripts, 1912-1920-1929, amateur "Lig" collecting increased appreciably. A fair number had been collecting before the 1926 hurricane. This storm destroyed some of the shoreline hammocks along the keys, particularly Matecumbe, the home of *L. fasc.*, *dohertyi*. This shell has not been found since and lucky were the collectors that had them in quantity for exchange later.

About this time, or soon after, the first snail club was formed. The collectors met in a small building under the bridge which spans Miami River at 12th Avenue. There were about 15 members, all of whom were well acquainted with the glades and shell localities. Any of these men could, by glancing at a shell, recognize the locality or place of origin.

I don't know what the purpose of the club was unless to extract as much information as possible from the newer members, as well as keeping

complete tab on what was being found. Remarks were often made calculated to mislead the unsuspecting neophytes. Stories were tall, locations were never divulged. So, as might be expected, members just dropped out, each keeping his own secrets and collecting harder than ever. At the time of the '35 hurricane, there were a good hundred collectors in the fields on weekends. The *field* means most of the three lower counties in south Florida.

It was hard going in the days before the glade buggy and the airboat. Some hikes into new areas meant overnight camping, or even longer. There were times when a twenty mile circuit was walked in a day.

Then it was common practice to take a large number of shells, new collectors in particular, while many others felt they needed large series from each locality to have a good collection. Many hammocks were heavily stocked with shells, so it was easier to bag them and sort out the culls at home.

In spite of the good fellowship among snailers, competitive collecting has always been keen. This, of course, didn't help conservation a bit.

The Everglades west of Miami are flat and monotonous to most travelers. To the hunter, fisherman, "snailers" and general out-of-doors people, it has an special lure which continues to grow on one. There are seasons when the glades are dust dry and times when the area is covered with water as far as the eye can see. It also can be very hot on bright days and cool to cold at night. The white puffy clouds, against a deep blue sky, seem to be just overhead. Surrounded by air, water and grass, the hammocks in the distance appear dark and inviting because these hammocks are the home of the lowly snail.

Liguus bearing hammocks are found in the Caribbean pine forest, the open glades, along the Cypress strands and the dune areas of the shores. Wherever one comes upon a new hammock, the urge to prospect it for something new in shells or plant life is always exciting.

What snailer doesn't remember Mac's Place at 40 Mile Bend on the trail and the cold beer after a hard day collecting. I can remember drinking two cans and will swear it never passed my throat; I was so dehydrated. Mac's Place was the meeting place of the hunters, froggers, fishermen and "glade rats" in general which, of course, includes the snailers. Some lively and

interesting discussions were always going on. Shell talk was sure to be one topic of the day and many a hot discussion followed. Jokingly, it became known as the liars' club. I remember old Mr. Ebbitts, who started late as a collector, coming into Mac's more than one weekend with a handful of fine *Liguus* and not one of the more experienced collectors would tell him what he had or where he had been, although each knew the exact shell and where he collected it. Old Mr. Ebbitts didn't mind, he simply said, "I'll find out for myself, eventually."

Much misinformation was practiced at Mac's. Snailers are known to be straight-faced liars and this was the place to learn—from professionals. Most of the misleading information was in fun, however, and not intended to be vicious, unless you objected wasting the day looking for the phantom hammock.

Collecting was at its peak just before World War II. Many new hammocks were found. At the height of collecting there were often 25 or more collectors in Pinecrest area alone, over one weekend, and their take must have been at least 1,000 shells. This intensive collecting continued after the war and did not slow down much until about 1950. Fires were prevalent during the heyday and many ugly things were attributed to the collectors. Much of this was not deserved. Hunters contributed their share of fires along with the campers and fishermen. We were making a survey of the Park in a glade buggy with the ranger and our glade buggy's exhaust started a glade fire that lasted for three days. Even after the fires, if any "Ligs" were left they often came back prettier and larger than before. A burned hammock usually lets in more light and air, which produces more food so the fewer shells thrive better.

At the first word of the formation of an Everglades National Park the rush for shells was on. Many hammocks were collected hard, anticipating the time when the area would be closed to all collecting.

Liguus were sold among collectors and dealers all over the Miami area and elsewhere. There was a fad on *Liguus* necklaces, and it was not uncommon to see them around the necks of fashionably dressed ladies on the streets of Miami.

By this time rare and good forms were becoming scarce. Many collectors found it necessary to re-plant good types from the original hammocks to locations unknown to other snailers. This practice made collecting very

fascinating. Rare color forms popped up everywhere. Roadside trees were "planted", backyards and even along the streets of Miami. It wasn't necessary to go out into the field. Sometimes, just checking your neighbor's grapefruit tree was rewarding. You can imagine the transplanter often lost his prize shells to others.

In 1942 the first new race of *Liguus* to be found in a long time was discovered by William Osment on Howe Key. *Liguus fasciatus osmenti* Clench. Osment has always been an avid collector. You name the trip and kind and he is ready. I have collected with him in Cuba and in the Everglades for both plants and shells. In Cuba we found *Epidendrum phoenicun* which we promptly named the chocolate orchid because of the scent. The species was known before but not in many collections; the common name is still the chocolate orchid.

I was with Osment and his family on the second trip to Howe or House Key. It was loaded with rattlesnakes. I think we killed seven on that trip. I have never seen snakes more abundant than at Howe Key. Many years before, on the high ground of Madeira Bay, there were snake stories beyond belief. One old-timer declares there was a boa 23 feet long and the guardian of Madeira Bay.

In 1954 (published date) Erwin Winte found a new color form in the Long Pine Key area—*Liguus fasciatus wintei* Humes. Winte has been a long time conservation officer. He has done much on the preservation of *Liguus*. You will read more about him later.

Captain Von Paulsen surprised the collecting clan with the latest find. He discovered *Liguus fasciatus von paulseni* Young, on Middle Torch Key. Von Paulsen, a Coast Guard Captain and aviator, was the first to fly the National Park Service over the Everglades to determine possible boundaries for the Everglades National Park. He assisted Dan Beard, first superintendent, and many other notables toward this end. He is still a collector and will take anything he sees; even now, in his seventies. Both of us being of World War I vintage, we have had many a muscle cramp together. I have known times when his vocal chords would not respond to speech from sheer exhaustion; I was there in the same condition.

Collecting now by the old-timers that are still living and able to do so, is limited to just a few shells at a time and only matched forms. A locality

collection which used to be the vogue is now considered unimportant. I suppose the new batch of young collectors are trying to represent as many localities as possible doing exactly as we did as beginners, taking every shell that we could find.

The end of collecting *Liguus* is not over by a long shot! There are many hammock areas where shells can still be found in abundance.

Erwin Winte was the first, to my knowledge, to transplant or "farm out" *Liguus* successfully. Proving that one could cross two distinct forms and make a hybrid. Others have been successful, too. Archie Jones raised a rare form, *splendidus*, from "eggs" to "3-year-olds" in his back yard. He brought food in on branches several times each week.

On the strength of these experiences, Jones, Winte, Von Paulsen and I, formulated the idea of taking rare forms we had "hidden out" and transferring them to the Everglades National Park, to protect the species from extinction. With the understanding help of Dan Beard, the Park's first superintendent, permission was granted by the Park Service. Time will prove this to be a very wise decision on their part. Most of the color forms will be preserved for posterity to study and admire. These four men that are now collaborating on the project have all had twenty-five years experience in the field, and I doubt if anyone now living knows more about the habits and needs of these mollusks. Only shells which were not native to the Park were brought in. Nearly all of the fine and rare races, more than 30, are now doing well and are not lost to science.

Expanding populations along both east and west coasts of Florida may have pushed the Seminoles deep into the Everglades, but it obliterated many *Liguus* localities for building sites especially in Dade and Broward Counties. It is more than likely the time will come when no hammock will be left with enough trees to support a small colony of *Liguus*.

The Everglades National Park is the last refuge for shells and many rare forms of plant life.

Seminole seem to like these shells as there are nearly always some living around the Indian Camp hammocks which suggests that they might have brought them in, but not likely for food purposes as the animal has a

very bitter taste. If "Ligs" were symbolic to the Indians, it is strange none were ever found in the graves of either the Caloosea, Tequesta or the Seminoles. Yet each of these tribes were well acquainted with marine shells and used them for many purposes, according to Dr. John M. Goggin, late head of the Anthropology Department of the University of Florida.

Along with this fascinating hobby, I have enjoyed years of wonderful companionship. I have eaten turkey soup made by old Captain Tony's squaw and Seminole soup is the worst combination of ingredients. But no matter what the ingredients were, it always tasted like gar fish or skunk. Many times we have had trouble along the snailer's trail, a twisted ankle, a broken toe, or our glade buggy stuck in a mud hole. These and many other experiences have been the fate of snailers and other gladers. Once I ran into a cactus. It stuck an inch-long thorn under my kneecap, but there was my companion to help carry me out. Another time a large centipede stung me on the forearm. Believe me, this was no fun! I was in pain for 17 hours and nothing could be done about it.

Enduring friendships are formed while following an obscure Indian trail in the dark; riding the waves in a small boat; crossing an angry bay; the long ride home at night from the Lower Keys after a fruitless day; or, lying flat on our bellies in the sawgrass to avoid lightning in a thunderstorm. These and many other experiences one cherished for a lifetime. I believe all "snailers" are my friends, and I am proud to mention a few I have made over the years: Archie Jones, Erwin Winte, Capt. Von Paulsen, Roy Fields, Capt. Norman White, the McGinty Brothers, William Osment, C. N. Grimshawe and Dan Beard, and the entire Park personnel along with many others.

The following list of over 200 persons includes most of the known collectors. The dates indicate approximate beginning of collecting. These scientists and amateurs have contributed all we know today about the tree snail—*Liguus fasciatus*. No doubt there are more collectors not accounted for here. It would seem an impossible task to list them all, even with the help of many old-timers, as well as the excellent assistance of Dr. W. J. Clench. My apologies to those unintentionally left out. The whole history of shell collecting has been far from entirely selfish. Many of these people have shared or given collections to public schools, private institutions and museums. My own collections may be seen intact at the Everglades National Park Museum.

In spite of the tremendous number of shells taken over such a long time and by so many people, there are still quantities of "Ligs" in various areas.

If you want to be a "snailer" the equipment is simple, and so are you! All that is required is a long pole with a cup on the small end, a machete to cut your way in and out of the underbrush and sawgrass, and a very small collecting bag. And, if you're stupid enough to tramp mud and water for as much as eight to ten miles a day, you're welcome to try it. I have had it!

On second thought, who wants to go next Sunday?

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Editor's Note:

The names of many persons listed here are incomplete. We decided it better to publish them in this form rather than to omit them. More complete names and additional names may be possible in a 1966 supplement.

LIST OF LIGUUS COLLECTORS OR WRITERS

1744-1958

- Tucker Abbott: Curator Mollusks, Academy Natural Sciences, Philadelphia, Pa.
 Dr. C. G. Aguayo: University of Havana: former Curator Mollusks, now University of Puerto Rico, Mayaguez, Puerto Rico
 Charles Allen, St. Petersburg, Fla.
 Benny Anchinlick
 Anton, 1839
 A. F. Archer: Professor, Tift College, Forsyth, Georgia
 James Arias: Miami fireman, 1935
 R. Atmus: manager factory, Springfield, Massachusetts
 F. C. Baker: former Curator Mollusks, University of Illinois
 Dr. H. B. Baker: Associate of Pilsbry Academy Natural Sciences, Philadelphia
 Dr. Blenn Bales: Circleville, Ohio; Marine shells mostly
 Dr. Thomas Barbour: former Director Museum, Harvard MCZ
 Dr. Barge: unknown
 D. W. Barnes: early conchologist of Ohio
 Les Barrett: Engineer-Architect, Miami, Florida, 1930
 John Bartlett: Malachologist, 1844
 Dr. Paul Bartsch: former Curator of Mollusks, U. S. National Museum
 Fred M. Bayer: Asst. Curator, University of Miami
 Dr. J. H. Beal: Beal-Maltbie Museum, Winter Park, Florida
 Adele Koto Bedell: mostly marines, Beloit, Wis., 1937
 Dr. J. C. Bequaert: Tropical Medical Snails, formerly of Harvard now of University of Arizona. Author of shell manuscripts.
 Dr. P. Bermudez: Conchologist, Cuba
 W. G. Binney: early collector, 1844 conchologist
 A. D. Blalock: Big Pine Key, Florida
 W. F. Blanton: County Judge, Miami, Florida
 Feliz Braddock: Plaster-contractor, hunter, Miami, Florida
 Mary Brickell: sold Brickell hammock shells to tourists at 5c each
 W. S. Brooks: Ornithologist, Orleans, Mass. Spent the month of March 1920 collecting the lower Florida Keys; Cape Sable; Flamingo and Choceloskee for *Liguus* for the Museum of Comparative Zoology
 Brugiere: 1792
 Buck Buckshorn: Tool & Diemaker, Miami, Florida
 Luther Bunell, Miami, Florida
 C. M. B. Cadwalader: Former Director, Academy Natural Science, Philadelphia, Pa.
 R. E. Call: school teacher—book on shells, Indiana
 Ed Campbell: iron worker, Miami, Florida
 Campbell: Florida Power & Light Co.
 J. Christensen: Lawyer, Miami, Florida
 F. Christie: Musician
 Geo. H. Clapp: collected with Simpson. Aluminum Co., Pittsburgh
 W. F. Clapp: former Curator of Mollusks, M.C.Z.
 W. J. Clench: Curator Mollusks, M.C.Z.
 H. V. Coffee: Orange State Oil Co., Miami, Florida
 W. D. Collier of Collier County, Florida: planted Ligs. 1873

- T. A. Conrad: geologist Academy Natural Science, Philadelphia about 1950
 Wm. Crouch: Accountant, Miami, Florida
 A. C. Currier: amateur collector, Michigan author, michigan shells
 Cecil Curry: Lawyer-Judge, Miami, Florida
 W. H. Dall: former Curator Mollusks U. S. National Museum
 Davis: fireman, Miami
 Mr. and Mrs. Deberg: traveling salesman, Miami, Florida
 Dr. and Mrs. Otto DeBoe: author, Miami, Fla.
 Dr. W. F. DeCamp: Civil War surgeon, Grand Rapids, Michigan
 R. F. Deckert: 1st *Liguus* collector at Pinecrest region with Farnum, Herpetologist, Miami, Florida
 Jim Dill: Ex-Lt., U. S. Army, hermit of Pinecrest
 Margaret Doe: author, described several *liguus* unintentionally in *Nature Magazine*
 Ted Dranga: dealer-collector from Hawaii and Miami
 S. C. Ebbets: newsman, Miami, Florida
 D. L. Emery: collector, St. Petersburg, Florida
 W. J. Eyerdam: collector for Smithsonian and Harvard Museums
 Dr. G. B. Fairchild: Entomologist, Panama
 J. N. Farnum: naturalist, early Pinecrest days
 E. G. Feria: Cuba
 Roy Fields: orchid grower, Miami, Florida
 John Finlay: Wilmington, Delaware; mostly marines
 Florence Forsyth: Lepidoprist, Florida City, Florida
 R. W. Foster: Research Associate, M.C.Z.
 Dr. H. Fox, Sr.: M. D., Miami, Florida
 Dr. Harold Fox: Father and son collectors
 Henry Frampton: Biological supply and dealer, author of several color forms of *Liguus*, Miami, Florida
 Fred Fuchs, Sr.: Homestead, Florida
 Fred Fuchs: Postmaster, orchid grower, Homestead, Florida
 Theo. Gill: worked mainly on fish U. S. National Museum
 Howard Gilmore: Eastman Kodak, Massachusetts
 J. A. Goggin: D.D.S., Miami, Florida
 Dr. J. M. Goggin: Anthropologist, University of Florida
 Calvin Goodrich: former curator Museum University Michigan
 Dr. A. A. Gould: author Shells of Massachusetts
 C. N. Grimshawe: Investigator for City of Miami, Civil Engineer, Miami, Florida, large collection
 Dr. Paul Guitart: formerly Director of the Kate Plumer Bryon Memorial School in Guines, Cuba, now living in Indiana
 F. K. Hadley: dealer, Newton, Mass.
 Layman Hardy: science teacher, Miami, Florida
 Albert Hay: Supt. Orange Bowl, Miami, Florida
 Alfred Hay: Pogy.
 Henry Hemphill: Conchologist, 1882
 H. H. Henderson: explorer—collector
 J. B. Henderson: U. S. National Museum
 Dr. L. G. Hertlein: Curator of Mollusks, California Academy Science
 Jack Hickey: postal employee, Miami, Florida

- W. Hodges: Massachusetts collector
 Carl Hughes: U. S. Coast Guard, Miami, Florida
 H. Hull: citrus grower, Miami, Florida
 R. H. Humes: sculptor, 1933, collaborator Everglades National Park. Donated his collection to E. N. P.
 A. L. Humphries: U. S. Dept. of Agriculture Entomologist
 Eleanor Hutchinson: amateur collector, Miami, Florida
 Wm. H. Hutchings: and daughter
 R. W. Jackson: farmer, Cambridge, Maryland
 Paul Jester: Bank clerk, Miami, Florida
 Archie Jones: Drug company executive, Miami, Florida. Collaborator E.N.P. Large collection
 Kenny Jones: son of Archie, started at eight years of age
 C. W. Johnson: former Curator Mollusks Boston Society Natural History
 Les Karcher: U. S. Coast Guard, Miami, Florida. Chief Boatswain Mate
 Dr. A. H. Kasper: Miami, Florida
 G. B. Kesson: planted shells on Marco Island, 1907
 Mrs. Kitchings: Sugar Loaf Key
 George Klager: contractor, Miami, Florida
 A. S. Koto: Manufacturer, Beloit, Wisconsin
 Phillip Kyne: Miami, Florida
 Charles Lang: tinsmith, Miami, Florida
 Isaac Lea: patron Academy Natural Sciences, Philadelphia, Pa.
 N. W. Lermond: Naturalist, Maine. Had museum at Thomaston
 Newt. Lewis: Game Warden, Miami, Florida
 Lincoln: Dealer, West Florida
 Linne, 1758: early scientist
 Lippincott, Jr.: publisher
 Livingston: Civil Engineer, early collector, Homestead, Florida
 G. A. Lohr: Aviator, Miami, Florida
 Lossman, 1900: Lossman Key
 Dr. and Mrs. Y. C. Lott: Naturalist, orchid grower
 H. N. Lowe: author, San Diego, California
 Marion Lowe: Key West, also plant collector
 W. B. Marshall: former assistant Curator U. S. National Museum
 Harold Martin: Salesman, Miami, Florida, 1938
 Judy H. Mason: Curator Rollins College Museum (Huggins)
 Alicia Masnata, Miami, Florida: Mostly Cuban shells
 Robert N. Masters: accountant, Miami, Florida
 Doug, Matthew: well driller and plumber, Miami, Florida
 Mrs. B. McClendon, florist
 Paul McGinty: Boynton Beach, Florida, brother of Tom
 Tom McKinty: general collector, author of shell literature and collaborator with Pilsbry on his monograph
 Geo. McLaughlin: fireman, Miami, Florida
 Chester Melville, Chestnut Hill, Mass.: general collection
 Dr. Mendel, Jr.: Miami, Florida
 Dr. Edwin Mercer: collected with Simpson

- Phil. Modzger: Pharmacist, Marathon Key Vaca
 Denysde Montford: conchologist, 1810
 Roy Montgomery: Handcrafts, Miami, Florida, dealer
 Wayne Montgomery: Builder, Miami, Florida
 C. B. Moore: explorer, archaeologist, 1904
 Earl Moore: Naturalist, Miami, Florida. Started collecting as a small boy.
 Louise Moore: artist, Miami, Florida
 Hebard Morgan: author, 1904
 Charles Mosier: Superintendent, Royal Palm State Park, 1920
 Ed. Moylan: realtor, Miami, Florida, large collection
 Muller, 1744: early conchologist
 John Olsen: Geologist, Miami, Florida
 Wm. Osment: Hollywood, Florida, found *L. fasciatus osmenti* Clench on Lower Keys.
 Orchid grower.
 Osteen: (Supt. Royal Palm State Park?) Homesteader
 Ralskey Owens: bookkeeper, Miami, Florida
 T. Peale: conchologist, early collector, 1825
 L. Pequeno: dealer in Cuba
 Ed. Peterson: game warden, Miami, Florida
 Pfeiffer: conchologist, 1850
 A. Pflueger: taxidermist, Miami, Florida
 John Pflueger: taxidermist, Miami, Florida
 Binky Pilsbry: daughter of H. A.
 H. A. Pilsbry: former Curator Academy of Natural Science, author shell books, 1907
 Don Poppenhager: hunter, explorer, Miami, Florida
 John Porter: explorer, collector, Miami, Florida
 Whitie Porter: explorer, collector, Miami, Florida
 A. W. B. Powell: Director Auckland Museum, N. Z.
 C. S. Rafinseque: early naturalist
 V. Raul: dealer, Key West
 J. S. Raybon: explorer, machologist, 1904
 A. G. Reeve: conchologist, early collector
 H. A. Rehder: Curator U. S. National Museum Mollusks
 P. S. Remington: professor mathematics, St. Louis, Mo.
 H. Rhodes: State Conservation Officer, Miami, Florida
 Thomas Say: Academy Natural Science, early writer on Mollusks
 Herb Schaller: Miami City plumbing inspector
 Jack Schmidt: dealer, Lake Worth, Florida
 Dr. Leanne Schwengle, Philadelphia, Pa.: large general collection
 Dr. H. A. Seeds: Miami, Florida orchid grower
 Shanor: U. S. Department of Agriculture
 W. F. Shay: early collector
 C. T. Simpson: former Assoc. Curator U. S. National Museum, author Florida books.
 Collected first "Lig" 1882
 Harold Skinner: Miami, Florida
 H. H. Smith: Curator Mollusks, University Alabama
 Maxwell Smith: author shell books, Lake Worth, Florida. Large general collection now
 in the University of Florida Museum

- Sparling: fisherman
 Wm. Sperline: fisherman, Florida
 Carl Squires: Civil Engineer, Dade County Maps, Miami, Florida. Large collection
 Jim Stanley: photographer, Miami, Florida
 E. Stiles: Miami, Florida
 Dr. Strong: 1822
 Mrs. C. Susong: wife of druggist, Miami, Florida, fair collection
 N. Swainson, 1822
 Oscar Swed: taxidermist, Miami, Florida. Brought in first *L. fasc. gloriasylvatic's* from Pinecrest No. 31
 Margaret Tervas: author
 J. W. Thomas: aviator, Miami, Florida
 Chester Thompson: dealer, Key West, Florida
 L. A. Thurston: early explorer
 J. R. Le B. Tomlin: largest private collection shells, England
 Dr. C. de La Torre: President, University of Havana, author shell books
 G. W. Tryon: former Curator Mollusks, Academy Natural Science, Phila., Pa.
 Valenciennes: early conchologist, Paris, France
 Henry Van der Schalie: Professor, University of Michigan
 T. Van Hyning: former Curator Florida State Museum
 Louise M. Vaughn; Miami License Department
 E. Von Martens: Former Curator of Mollusks, Berlin, Germany
 C. C. Von Paulsen: Capt., U.S.C.G., Miami, Florida, found form *L. fasc. von paulseni*
 Geo. Waldeck: veterinarian, Miami, Florida
 A. Walrath: naturalist
 A. R. Walrath: Ichthyologist, N. Y.
 Charles Walton: Australia
 Monroe Walton: collector, Electrical Contractor, Glendale, California
 J. H. Weaver: merchant, Miami, Florida
 W. F. Webb: dealer, Tampa, Florida, author book molluska
 J. A. Weber: ornithologist, author shell material
 Welch: early collector Solidar, Cuba
 Welch: brother of above, Miami, Florida
 A. J. Wetherby: collected in Cuba, early
 Williams, Miami, Florida
 Walter Williamson: collected with Grimshawe, later lost exploring the Amazon
 N. J. Winkelman: naturalist, Miami, Florida, electrical contractor
 Paul Winkelman: orchid grower, Miami, Florida
 Rev. Winkley: New England Collector
 Mina Winslow: former Curator Mollusks University of Michigan
 Erwin Winte: Everglades National Park Ranger, Re—"wintei", Miami, Florida
 Charles Wright: early exploring in Cuba
 Frank Young: professor University of Indiana, author of many papers on *Liguus* and "*Lig. fasc. von paulseni*". His aid has been extremely valuable to the E. N. P. project on shells.