

# Pacific Conchological Club

## Presidents Message

Season's Greetings and hopefully a Happy New Year.

As this is the last issue of Las Conchas for this year, I want to remind our members about SCUM X. The tenth meeting of the Southern California Unified Malacologists (SCUM) will take place on January 21st 2006 at the Santa Barbara Museum of Natural History. SCUM is a loose association of mollusk workers in Southern California. SCUM meets annually for an informal information exchange and updates on current work in the region. Everybody is welcome to attend. If you want to be sure

to obtain all subsequent updates, please send an e-mail to Daniel Geiger <[geiger@vetigastropoda.com](mailto:geiger@vetigastropoda.com)>; if you attended SCUM meetings in the past, you \*should\* receive e-mails. Updates will be sent in due time. Anyone who attends can

make a presentation about any topic related (more or less) to mollusks, or voice an opinion or brag about our shell club.

This month's issue features an article from Phil Liff-Grief about micro-mollusks with photos taken by Bert Draper in the 1970's. Three lessons to take from this article are (1) The variety of California shells easily available to amateur collectors is greater than you thought, (2) Amateur collectors can still make important contributions to the science of malacology and (3) You can have an enormous shell collection and still have room to display it. Also in this issue is the third installment of how shells were used by Oceanic peoples.

Finally, be sure to attend the annual Christmas party.

Bring your favorite food to share at the potluck. We provide roasted chicken; we could use salads, side-dishes and desserts. ...And don't forget to bring a shell or related gift to exchange.

Terry Rutkas



*Liotia fenestrata* Carpenter, 1864 4 mm

Photo by Bert Draper

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### Las Conchas is a publication of the Pacific Conchological Club

#### Pacific Conchological Club Officers:

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The Pacific Conchological Club was organized in 2003 as a result of the merger between the Pacific Shell Club and the Conchological Club of Southern California. Its mission is to further the interest in shell collecting and malacology and to provide a forum for individuals who love shells and other marine life. The Club meets on the second Sunday of each month from October through June at the Los Angeles County Museum of Natural History (900 Exposition Blvd., Los Angeles).

## Southern California's Rich Micro-Fauna: A cursory Look at Some Local Intertidal Marine Mollusks

Phil Liff-Grieff

**A**mong the holdfasts of giant kelp.... In gravel.... In mats of calcareous algae on low intertidal boulders.... Under rocks.... On eel grass blades.... In drift material at the high tide line..... Attached to Aggregating Anemones....

Micro-mollusks (generally defined as those with shells under 10 mm in size) can be readily found in these and other intertidal habitats along Southern Californian shores. The shells of these tiny animals are among the most beautiful in our local fauna but very few collectors have taken the opportunity to get to know and appreciate them.

They are easy to collect, and wide-ranging in their diversity. For this article, I collected a Ziploc bag full of coralline algae scraped from the surface of a rock on the harbor side of the Kings Harbor breakwater in Redondo Beach. While I am still identifying some of the species that were found amongst the dense algae clumps, the preliminary list of micro-mollusks includes:

*Acteocina harpa* (Dall, 1871)  
*Alvinia purpurea* (Dall, 1871)  
*Amphithalamus inclusus* Carpenter, 1864  
*Amphithalamus tenuis* Bartsch, 1911  
*Barleeia haliotiphila* Carpenter, 1864  
*Barleeia sp.*  
*Caecum californicum* Dall, 1885  
*Caecum occidentale* (Bartsch, 1920)

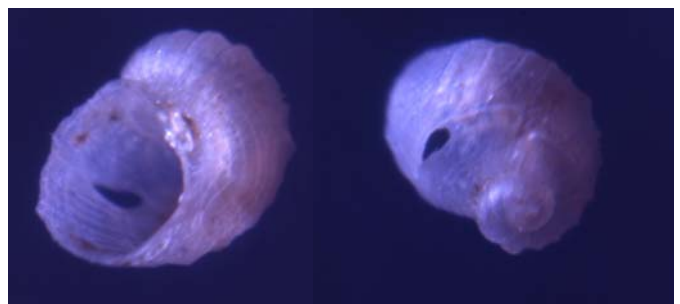
For a thorough discussion on how to collect and store micro-mollusks, refer to **Las Conchas Vol. 35, #2 (November, 2003)**. A copy of this issue may be obtained in pdf form by E-mailing your editor at [pliffgrieff@sbcglobal.net](mailto:pliffgrieff@sbcglobal.net).

*Caecum orcutti* (Dall, 1885)  
*Clathromangelia cf. interfossa* (Carpenter, 1864)  
*Iselica ovoidea* (Gould, 1853)  
*Lasaea subviridis* Dall, 1899  
*Megatebennus bimaculatus* (Dall, 1871)  
*Nassarina pencillata* (Carpenter, 1864)  
*Odostomia aepynota* Dall & Bartsch, 1909  
*Odostomia eucosmia* Dall & Bartsch, 1909  
*Odostomia helga* Dall & Bartsch, 1909  
*Odostomia cf. navisa* Dall & Bartsch, 1909  
*Odostomia turricula* Dall & Bartsch, 1903  
*Odostomia virginalis* Dall & Bartsch, 1909  
*Parviturbo acuticostata* (Carpenter, 1865)  
*Sinezona rimuloides* (Carpenter, 1865)  
*Teinostoma supraevalatum* (Carpenter, 1864)  
*Turbonilla sp.*

Three small species were incredibly abundant in the sample I collected. The first of these, *Sinezona rimuloides* is a fine example of a Scissurellid, with a clearly defined slit near its aperture. Under 1 mm in size these shells are impossible to appreciate without a good stereoscopic microscope.

Also abundant were species from the family, *Barleeiidae*. These are a somewhat confusing group for me but with

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*Sinezona rimuloides* (Carpenter, 1865)

(.6 mm)

So. California micro-mollusks (Continued from page 2)

time and proper literature, I should be able to sort them out. Examples from two genera, *Amphithalamus* and *Barleeia* are pictured to the right. The *Amphithalamus* are easily recognized from the flat shelf-like surface that extends from the columella and parietal wall into the aperture.

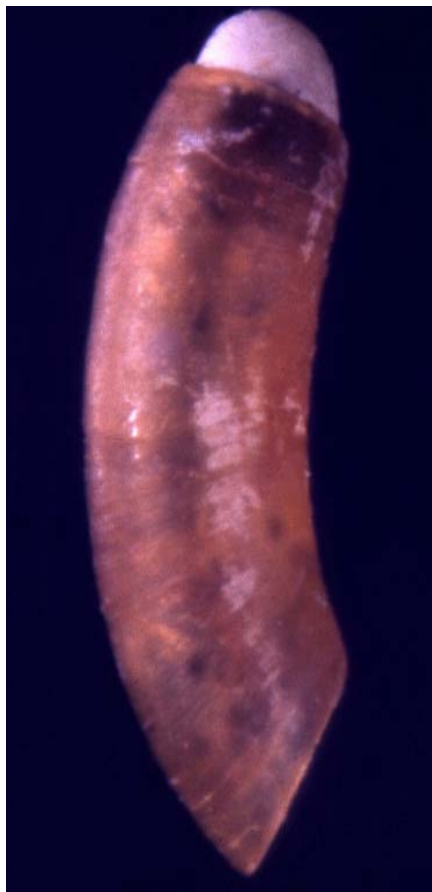
Another family that proved to be somewhat common in this sample of coralline algae is the *Caecidae*. Caecids are among my favorite of the local micro-mollusks. When collected live or fresh-dead, these tiny tube-like shells are often a golden brown in color and quite distinctive.



*Barleeia haliotiphila* Carpenter, 1864 2.3 mm



*Amphithalamus inclusus* (l and center) and *tenuis* (r) The largest is 1.3 mm in height.



The three most common Caecids found in this sample are very easy to distinguish from one another. On the left, *Caecum orcutti* (Dall, 1885) is the smallest (approximately 2-2.3 mm); smooth surface, a slightly pinched-in profile towards the aperture, a round plug, and an aperture that is at an oblique angle. In the center, *Caecum occidentale* (Bartsch, 1920) is also smooth with a rounded plug but it is larger than *orcutti* (3.5 mm) and has a more even profile throughout. *Caecum californicum* Dall, 1885 (right) is also larger (3.3 mm) with a heavier shell, pointed plug, 30 to 40 heavy rings and a thickened aperture.

(Continued on page 4)

*Southern California Micro-Mollusks (Continued from page 3)*

Another genus that was heavily represented in this sample was *Odostomia*. Small white-shelled mollusks in the family *Pyramidellidae*, these are abundant and diverse and the identity of a number of the shells in this sample will keep me busy for a while. Some of those I've been able to identify so far are pictured below (not to scale):



(from left to right) *Odostomia aepynota* Dall & Bartsch, 1909 (1.9 mm); *Odostomia turricula* Dall & Bartsch, 1903 (4 mm); *Odostomia eucosmia* Dall & Bartsch, 1909 (2.5 mm); *Odostomia navisa* Dall & Bartsch, 1909 (2.5 mm)

In this sample, the Skeneidae are represented by the beautiful species, *Parviturbo acuticostata* (Carpenter, 1865). This tiny shell (pictured right), approximately 2.5 mm in size, is one of the real gems of the Southern California micros.



The *Alvinias* (in the family *Rissoiidae*) are another group of diverse tiny denizens of our intertidal habitats. To date, I have only been able to identify one species, *Alvinia purpurea* (Dall, 1871) from this coralline algae sample. Two specimens of this 2.2 mm shell are pictured at left.

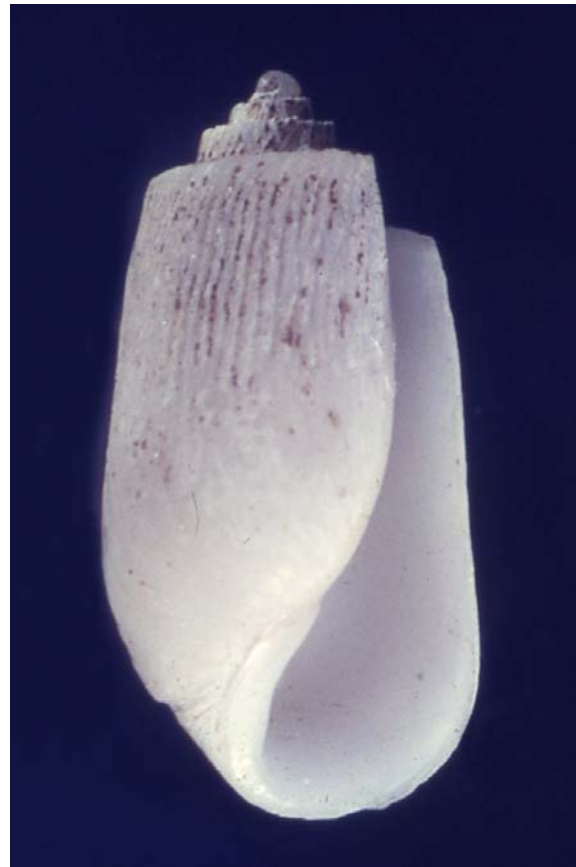
*Southern California Micro-Mollusks (Continued)*

A single Barrel Bubble shell turned up in the sample that was collected for this article. A shell of *Acteocina harpa* (Dall, 1871), it is a beautiful example of this genus that is represented by three other species in Southern California.

(Continued on page 6)



Closeup of spire and protoconch of *Acteocina harpa*



*Acteocina harpa* (Dall, 1871), 3.7 mm

**Minus Low tides** provide great conditions for observing mollusks and other marine life on Southern Californian shores. Listed below are some minus low tides that occur during daylight hours:

(Please be sure that you are familiar with the California Department of Fish and Game regulations regarding the collecting of live mollusks.) For details, check out the club's website at [pacific-conch-club.org](http://pacific-conch-club.org).

**December, 2005**

**January, 2006**

<u>Date</u>	<u>Time</u>	<u>Ht.</u>
Thursday, December 1	3:22 pm	-1.0
Friday, December 2	4:06 pm	-1.1
Saturday, December 3	4:55 pm	-1.1
Sunday, December 4	5:48 pm	-0.9
Monday, December 12	1:33 pm	-0.5
Tuesday, December 13	2:15 pm	-0.9
Wednesday, December 14	2:54 pm	-1.0
Thursday, December 15	3:33 pm	-1.0
Friday, December 16	4:10 pm	-0.9
Saturday, December 17	4:49 pm	-0.7
Sunday, December 18	5:27 pm	-0.4
Tuesday, December 27	1:14 pm	-0.1
Wednesday, December 28	1:53 pm	-0.7
Thursday, December 29	2:34 pm	-1.2
Friday, December 30	3:15 pm	-1.5
Saturday, December 31	3:58 pm	-1.6

<u>Date</u>	<u>Time</u>	<u>Ht.</u>
Sunday, January 1	4:40 pm	-1.6
Monday, January 2	5:23 pm	-1.3
Tuesday, January 3	6:07 pm	-0.8
Monday, January 9	12:49 pm	-0.2
Tuesday, January 10	1:35 pm	-0.6
Wednesday, January 11	2:15 pm	-0.9
Thursday, January 12	2:51 pm	-1.0
Friday, January 13	3:23 pm	-1.0
Saturday, January 14	3:54 pm	-0.9
Sunday, January 15	4:23 pm	-0.7
Monday, January 16	4:51 pm	-0.4
Tuesday, January 17	5:18 pm	-0.1
Wednesday, January 25	1:02 pm	-0.4
Thursday, January 26	1:41 pm	-1.0
Friday, January 27	2:20 pm	-1.5
Saturday, January 28	2:58 pm	-1.8
Sunday, January 29	3:36 pm	-1.8
Monday, January 30	4:13 pm	-1.6
Tuesday, January 31	4:50 pm	-1.1

*California Micro-Mollusks (Continued from page 5)*

One of the smaller of the Collumbellidae in the Californian fauna and one of the most attractive, *Nassarina pencillata* (Carpenter, 1864), was well represented in this sample. Two color forms are represented in the photograph to the right. This species is generally about 5 mm in height.



*Clathromangelia interfossa* (Carpenter, 1864)  
mm



Finally, the Turrids are a common component of most micro faunas. The only representative of this complex group that turned up in this sampling was *Clathromangelia cf. interfossa* (Carpenter, 1864). I know that this genus has been reclassified as part of the Conidae but, somehow, it is difficult for me to call this a “cone” and not a Turrid.

*The following references were used in preparation of this article*

Marine Shells of Southern California, James H. McLean (March 20, 1978)

Common and Scientific Names of Aquatic Invertebrates from the United States and Canada: Mollusks, Donna D. Turgeon, et al (1998)

**The pictures of micro-mollusks published in this issue of Las Conchas were scanned from slides taken by Bert Draper in the 1970's. These slides, from the collection of the Natural History Museum of Los Angeles County, are part of the important legacy that Bert left as an amateur malacologist. He focused much of his attention on many of the difficult families of micro-mollusks, photographing and identifying species from families which include the Triphoridae, Caecidae, and Vitrinellidae. Bert was an active member of the Conchological Club of Southern California until a year before his death at age 96 in 2000.**

Visit the Pacific Conchological Club on the World Wide Web:

*[pacific-conch-club.org](http://pacific-conch-club.org)*

## The Use of Shell in Oceanic Material Culture III

Terry Rutkas

**Oceanian Legend:** The rat and the crab went sailing in a canoe one day. During the trip the rat angered the crab by defecating on the crabs food. The crab sought revenge by breaking a hole in the bottom of the canoe and swimming to the bottom of the sea — leaving the rat to drown. As the rat struggled to keep afloat, he saw an octopus swimming nearby and called out, “please save me and I will give you a reward when we reach the shore!” The octopus, being naïve, let the rat climb on his head and started towards land. When they reached the beach the rat jumped off and started away. “Wait,” cried the octopus, “where is the reward you promised me?” The rat laughed as it ran away and said, “Look on your head for your reward.” The octopus reached up and felt rat droppings. From that day the octopus has hated the rat.

The traditional method of catching octopus (*feko*) in Tokelau, is to use a shell lure (*puletakifeko*) in the shape of a rat! The lure is towed from a canoe along the reef in the lagoon. Small pebbles



Tongan octopus lure. Pieces of broken *Cypraea tigris* are tied to a shaped stone and the whole thing is tied to a stick. It's easy to see how this could look like a rat as it is towed along the bottom of the lagoon. The picture above is a close-up of another lure.

are placed in the shell, which rattles to attract the attention of the *feko*. The fishermen in the canoe above watch for the octopus to dart from its hiding place and grab the lure. As soon as it has a good hold, the lure is pulled up with the octopus holding on tightly. Legend would have us believe that the octopus races from its hole to kill the hated rat, but the curious creature naturally loves to feast on cowry.

Tongans use an octopus lure that mimics the rat best. Broken pieces of cowry shell (typically *tigris*) are fastened to a small stone, which in turn is fastened to slender stick or branch to emulate a rat's tail.

Hawaiians called their version of the octopus lure *lebo be'e* — *lebo* meaning cowry and *be'e* (a variant of *feko*) meaning octopus. It differs from those from other parts of Polynesia in several ways, and there are even variations from island to island within Hawaii. A whole shiny cowry shell is tied to short stick. At the end of the stick is a hook of bone or shell (or metal, these days). Strips of *tapa* cloth or *ti* leaves are added to disguise the hook in the water. The whole thing is tied to a sinker stone about the size of the cowry shell. The preferred shell (by the octopus) is *Cypraea mauritiana*, but sometimes *C. tigris* is used.



Hawaiian octopus lure, *lebo be'e*. *Cypraea mauritiana*, koa wood, stone, bone, coconut fiber cord and ti (*ki*) leaves for a tail.

To prepare octopus for eating: before cooking, tenderize by beating it with a piece of wood or stone or wrap it in *panpan* (papaya) leaves. Bake in an *umu* (traditional oven) or boil it mixed with other ingredients for additional flavor (e.g. curry, coconut cream, onions, herbs) or boil and then sun-dry it.

## HOLD THE DATE

*upcoming shell club meetings*

Sunday, January 8, 2006

Sunday, February 12

Sunday March 12

Sunday, April 9

Sunday May 7<sup>th</sup>:

NOTE: *This is the FIRST Sunday*

Sunday, June 11

Sunday, October 8

Sunday, November 12

Sunday, December 10

**DECEMBER MEETING: December 11, 2005**  
**1:00 pm until ???**

**PROGRAM: Holiday Party**

**LOCATION: Home of David and Barbara Bridgnell**  
**26963 Bolan Lane, Palos Verdes**

Bridgnell's Phone: (310) 377-9710

### **DIRECTIONS:**

From the **San Diego Freeway** in the South Bay— exit on **Crenshaw Boulevard** and head south about 7 miles, past Pacific Coast Highway, up the hill to **Palos Verdes Drive North**. Make a left turn onto Palos Verdes Drive North and make an immediate right turn onto **Eastvale**. Proceed up the hill on Eastvale to **Bolan Lane** on your right. Turn onto Bolan; The Bridgnell home is at the end of the cul de sac.

**Bring a wrapped shell related gift of approximately \$10 in value for the annual gift "exchange".** The ensuing gift exchange activity is a lot of fun but, be warned, it can get ugly!!

**In addition, there will be a special sale of shells at great prices! So, bring your checkbooks and prepare to get some great deals.**

**Refreshments are potluck (the club will provide chicken).**

**Call or E-mail Janice Abdulian to RSVP; (818) 981-8533**

**[jab56@earthlink.net](mailto:jab56@earthlink.net)**

Articles of interest to shell collectors are solicited for publication in this newsletter. Contents may be reprinted with credit being given to the Pacific Conchological Club.

## *Pacific Conchological Club*

2447 Kemper Avenue  
La Crescenta, CA 91214

**DATED MATERIAL**