

NEWSLETTER



# San Jose Flipper Dippers

FEBRUARY 2025

GENERAL MEETINGS HELD  
3RD WEDNESDAY  
OF EACH MONTH  
[WWW.SJFLIPPERDIPPERS.COM](http://WWW.SJFLIPPERDIPPERS.COM)

## It's a Pelagic Plankton Party!

**Monterey Bay Scuba:** A guide to some of the pelagic planktonic creatures you may be seeing on your dives.

Let's start with the basics first. What does the word "pelagic" mean? The term "pelagic" is used to describe animals that typically spend most of their time in the open ocean rather than close to the reefs or kelp forests of the coasts. Tuna, for example, are considered pelagic fish since most of their time is spent offshore in open blue waters. Today however, we'll be looking at pelagic plankton, not pelagic fish.

So, what does the word "plankton" mean? Plankton, to put simply, are defined by their inability to swim against ocean currents. People often associate plankton with teeny flora and fauna you need a microscope to see, but there is an array of planktonic macrofauna (can see with the naked eye) that drift around at the mercy of the ocean currents. For example, Jellies are considered planktonic because though they can move around on their own to an extent, they are not strong enough to swim independent of ocean currents.

Upwelling events, in which deep water from the submarine canyons flows up from the depths and into coastal shallow waters, is often what brings these squishy creatures to our shores. Sometimes, these ocean currents bring pelagic plankton in close to shore, allowing us a view into this strange, gelatinous world. Lets take a look at 5 pelagic plankton organisms you may encounter while diving in Monterey.

The first bizarre plankton from the open ocean we'll take a look at is the Pyrosome (*Pyrosoma atlanticum*). Pyrosomes are gelatinous colonial tunicates that get their name, meaning "fire body", from their bioluminescence presented as a continuous brilliant blue glow. They feed by filtering through the water for tasty zooplankton. Pyrosomes are closely related to salps, the next organism we'll look at.

Our next peculiar planktonic pelagic is called a salp (*Salpidae sp.*). This is another type of colonial tunicate. They can form long chains and have complex

*When you rinse off your gear, be sure to collect all the pebbles!*



These Dippers got together on January 18 at South Monastery Beach for the postponed Second Saturday Scuba (S3) dive. Above, from left: **Eva Alexander, Carl Tuttle, Ken Agur, Jeff "Not on the List" Rowland and Cedric "Cold Feet" Wright.** They had sunny skies and chilly air but that didn't stop the group from getting in two dives. They had mixed vis from 10 to 30 feet, depending on where they were. A bit of surge in the shallow areas but less around 50 feet. Lots of marine life to see and enjoy. Ken made the comment that over time he's collected the Monastery Beach pebbles from his gear and has a number of full jars at home. Ken, can't you use them in your weight pockets? See more photos on page 4 🌟

nervous and digestive systems. Unlike pyrosomes, they lack bioluminescence and continued on page 5



Pyrsome photo by Phillip Colla

## What's Inside?



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## PRESIDENT'S CORNER



**Hi All!**

We discussed the club's 2025 calendar of activities at the recent Annual Planning Meeting. The calendar includes the usual monthly activities: business and general meetings, Second Saturday SCUBA (S3) dives and the Fourth Sunday Cycle (FSC) trips. And of course we'll have our annual Underwater Easter Egg hunt in April, campouts for Memorial Day and Labor Day weekends, Point Lobos dives, Elkhorn Slough kayak trips, fun in

Lake Tahoe and some purely social get-togethers. We plan to hold the popular Christmas in July event again this year too, but the date is still to be determined. The calendar is now posted on the Club's Website and is available in a pdf format too. Take a look and see what's in store for this year.

As these are our main activities, we'll add in additional dives during the year. As a reminder, why not offer to lead a dive? Many of you have a favorite dive spot so sign up to be the coordinator. See how easy it is with the guidelines on page 6.

I want to give a shout out to the Flipper Dipper Star Achievement Program! The Star Achievement Program is designed to provide Club Members the opportunity and encouragement to experience a variety of diving opportunities to become a better diver - and have more fun! Here's a link to the program requirements on the club website: <http://sjflipperdippers.com/starprogram.html>. **Jackie Gardner** is coordinating this program, so let her know if you have any questions about it or suggestions for updates.

**Stay safe and I hope to see everyone in the water soon!**

**Let's go diving! – Barbara**



# San Jose Flipper Dippers

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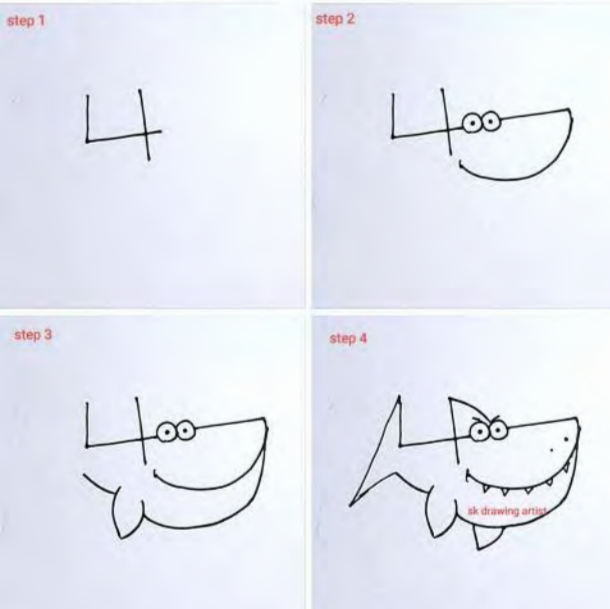
Jackie Gardner 408-274-9447

### TROPHY COMPETITION

o Position Open o

CLUB COMMITTEES

### How To Draw Shark





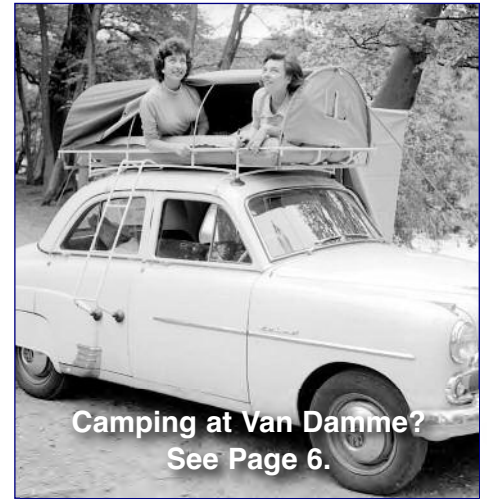
We'll be having our in-person General Meeting this month. If you come please bring a refreshment to share! We'll have a live Skype connection for those who still prefer to meet virtually. ☆

## MEMBERSHIP

Ken Agur

We're a dive club and we're diving! If you're looking for a dive buddy look no further. We offer all certified divers great dives, great fun and great friends! See the Club's website for more information on becoming a member (Membership Requirements). We'd love for you to join us!

**Happy Birthday!** These Dippers are completing their annual trip around the Sun this month: **Mike Chalup** and **Sim Upadhyayula**. ☆



Camping at Van Damme? See Page 6.

## Two species of ocean Sunfishes (*Mola mola* and *Mola tecta*) are seen in Monterey Bay?

Hook, line, and social media: Crowd-sourced images reveal size and species patterns of ocean sunfishes (*Tetraodontiformes*, *Molidae*) from California to Alaska

Taxonomic confusion and limited data have impeded species-level biogeographic analyses of the world's largest bony fishes, ocean sunfishes (*Molidae*; 'molids'), in many ecosystems. However, recent advances in molid taxonomy and the emergence of photo-based community-science platforms provide an opportunity to revisit species-level biogeography.

In this study, we use crowd-sourced images of 1,213 ocean sunfishes to determine if molid morphology visible in citizen-science images permits reliable species determination. From the ensuing data, we describe patterns in molid size structure and species composition from 1,178 molids observed in the Alaska and California Current Systems (ACS and CCS, respectively). Molids <1 m total length (TL) were commonly reported in the CCS, particularly off the

central coast of California, suggesting this area may function as a molid nursery. Molids >1 m TL were more commonly observed in both the CCS and cooler ACS, which suggests larger molids occupy a larger thermal range (ontogenetic habitat expansion) than smaller individuals.

Overall, *Mola mola* was the most frequently observed species in both the ACS and CCS; however, the persistent occurrence of *Mola tecta* in both current systems suggests a range extension for this otherwise Southern Hemisphere

species. The species identity of six *M. tecta* specimens from California and Alaska were verified with genetic analysis. Finally, two *Mola alexandrini* confirmed in the southern portion of the CCS represent the first records of this species in the North-east Pacific Ocean.

The use of crowd-sourced observations to study large marine animals presents both exciting opportunities and notable limitations. Overall, we report that media crowd sourcing is a practical, noninvasive, complementary tool to genetic analysis to elucidate species-level molid biogeography, with potential to compile much larger datasets than genetic sampling alone. By mobilizing large numbers of community scientists (in this case, hundreds of observers), we were able to expand the

	<i>Mola mola</i>	<i>Mola tecta</i>	<i>Mola alexandrini</i>	<i>Masturus lanceolatus</i>	
1					
1	Head bump, chin bump	Variable; develop with size in some individuals <sup>a</sup>	Absent	Pronounced; develop with size	Absent
2	Chin ossicle	Present	Absent	Present	Absent
3	Snout	Rounded or protruding	Rounded	Rounded or protruding	Rounded
4	Snout ossicle	Present	Absent	Present	Absent
5	Body skin wrinkles	Lengthwise, develop with size	Absent	Absent	Absent
6	Lateral ridges	Dorso- and ventro-lateral ridges develop with size	Short dorso-lateral keel	Dorso- and ventro-lateral ridges develop with size	Absent
7	Clavus margin	Wavy in some individuals <sup>a</sup> , ossifies with size	Rounded with small median indent	Rounded (slightly wavy in some individuals)	Rounded with median projection of varying length
8	Smooth band back fold	Usually absent, faint when present	Present, defined	Usually absent, faint when present	Absent
9	Clavus ossicles	Large, usually triangular in shape; usually 8 – 9	Small, elongated; usually 5 – 7	Large, usually round; usually 8 – 15	Usually none, max 4 at tip of projection (rare)
ns	Paraxial ossicles <sup>b</sup>	United	Separate	Separate	Absent
ns	Body scales <sup>c,d</sup>	Dot shaped, ragged tips, close set	Dot shaped, rounded tips, sparse set	Rectangular in larger fish <sup>e</sup>	Small, dot shaped, ragged tips, close set

<sup>a</sup>Generally more pronounced in Atlantic than Pacific *M. mola*; <sup>b</sup>Only visible in dried/decayed carcasses; <sup>c</sup>Only visible on high-resolution, close-up images; <sup>d</sup>Note, scale shapes vary across the fish, use body scales posterior of the pectoral fin for ID; <sup>e</sup>Confirmed in individuals >162.5 cm TL; ns: not shown in figure.

continued on page 5

**South Monastery Beach, January 18**

Photos by *Cedric Wright* from his GoPro.



Carl meets Mr. Crabby.



Eva loves diving with her Little Pink Fins!



Ken, Carl and Eva keeping warm between dives. Jeff and Cedric in back warming in the sun.



Jeff working on his skills.



A lingcod poses for a photo.



Ken and Carl watch a big school of blue rock fish.



Jeff, Eva, Ken and Cedric gear up for a couple of great dives.

continued from front page

can move through the water by contracting muscles that form bands around their bodies. These muscle contractors also allow them to pull water through their bodies to filter feed. There are 45 different species of Salp around the world!



Salp photo by Jon Anderson

Some of these pelagic plankton come from deep within the submarine canyons like the ethereal Sea Angels (*Clione* sp.). These elegant creatures are actually a type of predatory snail that prey on other pelagic snails. Though it is a type of snail, it has no hard shell. The sea angel gets its name from the wing-like structures they flap to move themselves through the water.

This next spicy little pelagic plankton is called a Hula Skirt siphonophore (*Physophora hydrostatica*) and they can pack a painful punch if you get stung by one. Like



Sea Angle photo by Ralph Pace

other siphonophores, the Hula Skirt siphonophore is colonial with each individual organism or “zoid” playing different roles like those for stinging and those for swimming. It has a float that allows it to change its density by changing the amount of gas held in its float.



Hula Skirt photo from iNaturalist

The last pelagic specimen we'll highlight is called the Spotted Comb Jelly. This intriguing and delicate creature

is part of a group of animals called ctenophores and is not a true jelly. These creatures are voracious predators of the planktonic world, using two sticky tentacles to catch and reel in prey. Scientists still don't fully understand what purpose the raised reddish-orange bumps they are named for, serve.



Spotted Comb photo by Chad King

We hope this information gives you a bit of insight the next time you see a mysterious translucent creature while diving in the kelp forests of Monterey Bay. Please keep in mind, when you see these or any other gelatinous pelagic plankton, they are delicate and even lightly touching them could cause them harm. The ocean is full of surprising and entrancing beauty we must respect and preserve. We'll see you in the water!

*Megan, John, Hunter, and the Monterey Bay Scuba Staff. ★*



continued from page 3

temporal and spatial range of molid data, which would be cost-prohibitive and logistically challenging for traditional monitoring approaches. This approach can be particularly useful for understanding the distribution and habitat use of data-deficient species that are frequently observed by humans.

However, key challenges include ensuring data consistency and accuracy (data quality varies), temporal and spatial observation biases (uneven observer density and interspecific behavioral differences), difficulty quantifying or standardizing effort across diverse data sources (e.g., divers, whale-watching vessels, beachcombing), and the loss of ‘absence data’ collected in traditional scientific surveys (which can be useful in predictive models of species range).

Media-based datasets and emerging technologies (e.g., artificial intelligence) have exciting promise for numerous applications, including molid species determinations and recognition of individuals; these technologies could be used

to generate large datasets and investigate environmental perturbations on molid strandings, mortality, behavior and site fidelity (e.g., Nyegaard et al., 2023). However, the approach currently has limitations; our crowd-sourced data collection suggests that the central coast of California may function as a nursery for young molids. These small molids, in general, cannot be identified to species from crowd-sourced media alone because they haven't yet developed clear diagnostic morphological characters. Developing a molid field guide (to include subadult molids) is vital to help identify key habitats for molids' early life stages and assess conservation status (Thys et al., 2020; Phillips et al., 2023).

Finally, although we find that *M. mola* is the most frequently observed species in the ACS and CCS, we also report – for the first time – the occurrence of *M. alexandri* (in the southern portion of the CCS) and *M. tecta* (from southern CCS to central ACS).



## San Jose Flipper Dippers' DIVE COORDINATORS WANTED

*We're looking for some. How About You?*



To be a Club dive coordinator you need only be a certified diver with some diving experience. It is important to remember that you are coordinating other certified divers who are diving within their training and experience limits. You should take care to not exceed that role. You should not act as a divemaster or an instructor (even if you are so qualified).

Safety should be the concern of all divers. Information such as who has a cell phone and whether oxygen is available should be shared with all the participants. Remember the 9-1-1 emergency number is a FREE CALL.

It should be assumed that a certified diver is qualified to dive in a situation that is within the limits of his/her training with a diver of equal qualifications. If you suspect that a dive situation exceeds the qualifications of a diver, you should explain to them the potential difficulties they may encounter. However, remember that it is ultimately the diver him/herself who must make the decision as whether to dive, and he/she is ultimately responsible for his decision. Safe diving is a must!

Follow the Club constitution: *“Encourage the conservation of all marine life by obeying all Federal and State game laws and urging others to do likewise.”*

## Simple Ten Point Guidelines

1. Choose a site/situation that you are familiar with and will be enjoyed by all divers.
2. Schedule your dive in time to be in the newsletter and announced at the Club meeting. Include the best method of contact so interested divers can contact you if they aren't at the meeting: Phone and/or email.
3. Collect the sign-up sheet after the Club meeting. If you can't attend, ask another member to get it for you.
4. If the dive will not occur as planned, make your best effort to contact all that expressed interest. Otherwise divers will assume the dive will occur as planned and show up at the site.
5. Make sure non-members are appropriately certified and have signed the Club's Assumption of Risk disclaimer (Available on the Club's Website).
6. Coordinate buddy teams to make sure that all divers who need a buddy, have one.
7. Tell all divers who are not familiar with the site/situation what they can expect entering/exiting the water and things to be on the lookout for.
8. Ask any divers who may want to leave early to let someone know so all divers can be accounted for after the dive.
9. Try to make the dive an enjoyable and safe experience for everyone, including yourself.
10. Plan to give a report on the dive at the next Club meeting. You can also submit a written report for the next Club newsletter so others can read about the dive. Take some photos of the divers too! ★

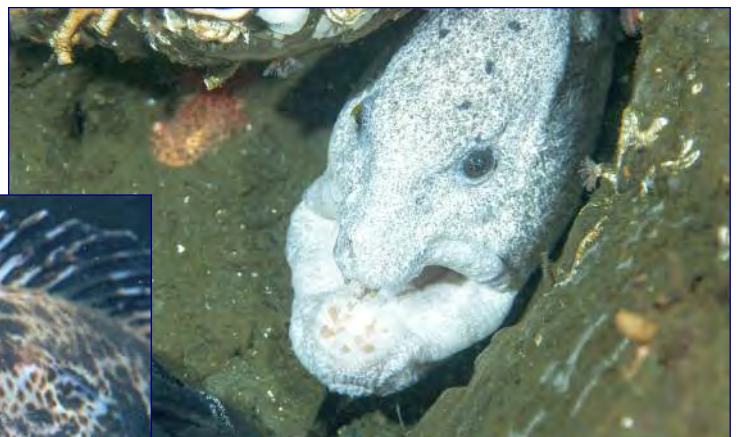
If you're up for your next adventure in diving, contact the Club's vice president: **Sim Upadhyayula**.  
Text: 669-286-9796 or email: [toytacous@yahoo.com](mailto:toytacous@yahoo.com).



## There's good diving up in the North West!

Mike Chalup

Hello Dippers from Oregon! Here are a couple of photos HI took during my November 21-24 trip to Flagpole on Hood Canal, Lilliwaup, WA. The weather was cool and rainy during my visit, but water conditions were good with visibility out to 50+ feet on some dives. Water temperature was 50-52 deg F. Short daylight hours near to the winter solstice and adverse tidal exchanges limited our group to a maximum of two dives each day. Some recent repairs on my drysuit kept me dry and comfortable for the 50 minute



average bottom time on the dives! Giant Pacific Octopi, lots of wolf eels, and loads of rockfish were seen during the dives.

Hopefully members of the Club will be interested in diving up here and we can start planning a trip during 2025. ★

# DIVE & ACTIVITY CALENDAR

SIM UPADHYAYULA

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FEBRUARY 2025

**SATURDAY, FEBRUARY 1**  
**NO SCHEDULED DIVE**

**WEDNESDAY, FEBRUARY 5**  
**BUSINESS MEETING: 7:30pm**  
The meeting will be held **virtually via Skype**. All members are invited to attend. Please email **Carl Tuttle** if you need the link to join. Bring your own food, drinks, and internet connection and we'll discuss ideas for upcoming dives and events.

**SATURDAY, FEBRUARY 8**  
**SECOND SATURDAY SCUBA (S3)**  
**BEACH DIVE: LOCATION TBD**  
Coordinator: **Sim Upadhyayula**, (email: toytacous@yahoo.com or text/phone: 408-608-5009). Join the Flipper Dippers for this month's Second Saturday Scuba! Be sure to watch your email for an update on a location and coordinator.

**SATURDAY, FEBRUARY 15**  
**NO SCHEDULED DIVE**

## **GENERAL MEETING** **WEDNESDAY, FEB 19**

The **in-person General Meeting** will be held at **7:30 PM** at the Knights of Columbus Santa Maria Hall 2211 Shamrock Dr., Campbell.

The **virtual meeting** will continue to be hosted via Skype.

Please contact **Carl Tuttle** for more details on the in-person meeting or a link to the virtual Skype meeting.

**Celebrate 60 Years of the San Jose Flipper Dippers!**

Entertainment:

- **Social Hour**
- **Sign Up for Dives**



**SATURDAY, FEBRUARY 22**  
**BEACH DIVE: LOCATION TBD**

A shore dive may be scheduled for those who want more and those who missed the S3. Be on the lookout for an email notice.

**TUESDAY, FEBRUARY 25**  
**LABOR DAY RESERVATIONS**

Labor Day Weekend Reservations for Van Damme (Aug 25 – Sep 1, 2025) can be made today for the annual summer camping event at Van Damme State Park. See more info below.

.....  
**UPCOMING IN MARCH**

- 05 Business Meeting
- 08 Second Saturday SCUBA
- 19 **General Meeting**



## **Labor Day Weekend: Aug 25-Sept 1 — Plan Now**

**C**ome join your fellow Flipper Dippers for a fun-filled weekend at Van Damme State Park. The opening for camping reservations in California State Parks ([www.reservecalifornia.com](http://www.reservecalifornia.com)) for the month of August will open soon. Site reservations are available 6 months in advance for a specific start date. Labor Day is on Monday, September 1st.

Some Dippers will be online at **8AM sharp, on Tuesday, February 25th**, to make site-specific reservations for nights starting Monday, August 25th through Sunday, August 31st (Lower Loop sites #1 – #13). There will be room to share if you want to join in just for the weekend.

Plan on bringing tanks, kayaks, mountain bikes to do some bike riding along the coast and park trails and maybe some hiking. Remember, the dive shop in Ft. Bragg closed years ago so there's no place for air fills.

It's always a fun time to sit around the campfire in the evening, telling stories and sharing great food!

So if you're interested in joining in for the holiday week(end), get online early as sites go fast. Contact **Carl Tuttle**: 408-829-3660, [tut-comms@sbcglobal.net](mailto:tut-comms@sbcglobal.net) for more information 🌟



## **EVERYTHING WILL KILL YOU**



**SO CHOOSE SOMETHING FUN**

**NOTE:** All certified divers are encouraged to attend San Jose Flipper Dippers' dives.

Non-Club members will be required to show proof of certification to the dive coordinator prior to entering the water with our group. Please sign up for dives at the General Meeting or call the coordinator. This is needed in case of cancellation or changes.



# San Jose Flipper Dippers

c/o 1108 Sunset Landing  
Rio Vista, CA 94571-5148



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## 2025 COMING EVENTS

Feb 5	Business Meeting
Feb 8	Second Saturday SCUBA
Feb 19	🔵 General Meeting
Feb 25	Labor Day Weekend Reservations (Aug 25-Sept 1, 2025) Van Damme
March 5	Business Meeting
March 8	Second Saturday SCUBA
March 19	🔵 General Meeting
April 1	Pt. Lobos Reservations for May 10
April 2	Business Meeting
April 12	Second Saturday SCUBA - U/W Easter Egg Hunt
April 16	🔵 General Meeting - SJFD 61 Years Old
Apr 25-May 7	Bonaire Dive Trip - Sold Out

*Are you looking for someone  
to dive with?*

The San Jose Flipper Dippers Dive Club is  
a great way to meet divers who are  
always having fun times. **Come join us!**



Watch This Space – Much More To Come!  
See the Club's Website for the full Calendar



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