



JULY 2006

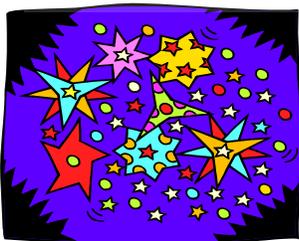
VOLUME 15 • ISSUE 7

# Showfish coast

PROVIDING EDUCATION AND CAMERADERIE TO PEOPLE WHO ARE INTERESTED IN KEEPING TROPICAL AND TEMPERATE FISH AND OTHER AQUATIC LIFE

NEXT MONTH'S MTG: AUGUST 6

**This month's meeting will be Sunday, July 2<sup>nd</sup>**  
*Happy Independence Day Holiday*



## Has your old check been cancelled?

*Did you send us a check earlier this year, only to have it vanish off the face of the earth?*

That may be just about what happened. If you have checks to COAST which are have not been cancelled yet, dating from the period of October 2005 through May 2006, payment on the checks should be stopped (or you can just consider them void, depending on what your tolerance for risk is). Pauline has deposited all checks she has received from members, either directly or through John Skocilic; no more exist in the backlog. Any new or replacement checks should be mailed to Pauline Jackson, 10926 Ranney Ave, Garden Grove, CA 92843 ■

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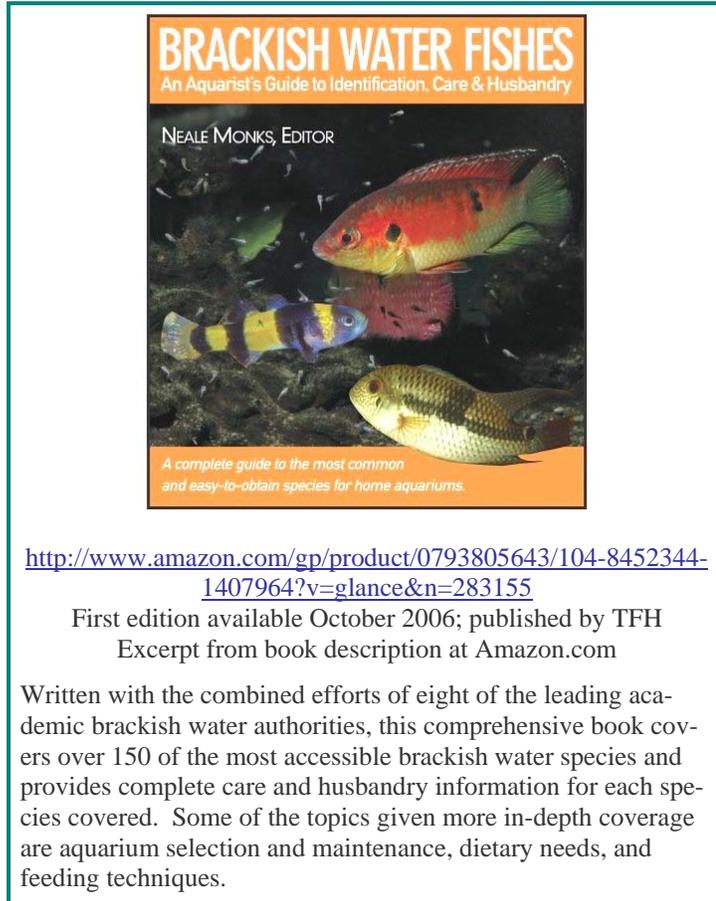
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# The Mangal Bog Biotope – A small challenge, but ever so rewarding *A bit of salt, a bit of mangrove, maybe a philodendron, and fishes that thrive nowhere else*

Charlotte Marelius

Frustrated with the course of your hobby at the moment? Bored with things you've done so well for so long they no longer challenge? Bedeviled by recurrent parasite or bacterial infections? A mangal bog aquarium could be just the solution for all your problems. Some would probably say it could also solve that nagging, particularly chronic problem that so disrupts your pursuit of our hobby: a remnant of sanity.

This brackish water biotope aquarium is a specialized type of "paludarium" (one of those "river" tanks with a low water level, water plants, and marginal land plants). The biotope may be better known to Americans as a mangrove swamp, but whatever it's called, the environment has produced some of the most interesting and hardy fish in the hobby.



<http://www.amazon.com/gp/product/0793805643/104-8452344-1407964?v=glance&n=283155>

First edition available October 2006; published by TFH  
Excerpt from book description at Amazon.com

Written with the combined efforts of eight of the leading academic brackish water authorities, this comprehensive book covers over 150 of the most accessible brackish water species and provides complete care and husbandry information for each species covered. Some of the topics given more in-depth coverage are aquarium selection and maintenance, dietary needs, and feeding techniques.

One of the challenges of brackish water fishes is that information about them is seldom organized into a group for easy research by hobbyists, but in 2005 Aqualog published "Brackish Water Fishes", by Frank Schäfer, published by Aqualog Verlag, ISBN 3-93602782-X; and TFH is publishing "Brackish Water Fishes", edited by Neale Monks, ISBN 0793805643 in October 2006, now available for pre-order at Amazon for less than \$26.

Brackish water lies between freshwater and sea water in salinity, with a specific gravity of 1.005 for weakly brackish water to 1.015 for strongly brackish water. Mangal bogs are found in estuaries, where there is a normal fluctuation of salinity caused by tides driving salt water up into the mouth of the stream, by a surge in freshwater flowing into the ocean, or by seasonal changes from rain or winds. Mangal bogs are also found at the edges of islands and peninsulas, standing in ocean water.

In America, aquacultured Red Mangrove (*Rhizophora mangle*) propagules (with roots and leaves), can be ordered from plant dealers. The much cheaper, occasionally available, seeds and plain tubers (that have neither roots nor leaves) are difficult to germinate and get started, but it can be done. The plants themselves may not be harvested from the wild, but the seeds may still be legal to collect. This particular species of mangrove can grow in fresh, brackish, or salt water. Mangroves need regular supplementation with iron and trace minerals, a water temperature of 72-78°F (not less than 60°F), with a pH of 8.1-8.4, and dKH of 8-12. Direct light from fluorescent, or side-light from halides (6000° to 8000°K spectrum), or a nice sunny window can be used.

Mangroves can be planted in gravel, sand, or mud; as long as they are kept in fairly stable positions (e.g., lodged between rocks), they can even be grown with no substrate at all. Leaves should not be submerged. The plants need a somewhat humid environment. Mangroves prefer a deep substrate and will develop an extensive root system and network of arching roots that prop them up in nature. They don't particularly like being moved and replanted much, so they may best be controlled by potting the plants if the roots would overwhelm the size of the tank.

Mangroves cannot withstand abrupt salinity changes, as they preserve the fresh water their tissues need by dumping the salt out of their leaves (so don't let the dropped leaves stay in the aquarium—duh!), and, rapid, extensive changes in salinity overwhelm the plant's abilities. Leaves need to be wiped off or heavily misted several times a week in a biotope tank. Mangroves grow very tall, left to their own devices, so it's important to trim the growth tip and to have a fairly deep tank without a cover. Basically, you can turn a mangrove into a bonsai. See <http://members.ozemail.com.au/~thebobo/afm.htm> (as found in Aquarium Fish Magazine Volume 7, Number 15, December 1995) for excellent mangrove information.

If they are slowly, carefully acclimated, *Anacharis*, hornwort *Ceratophyllum demersum* (very strong light, frequent fertilization), *Crinum thaianum*, or onion plant (laterite-rich substrate, strong lighting), water sprite, *Anubias nana* (low light, wood substrate), and *Vallisneria gigantea* or *V. asiatica* (strong lighting, regular fertilization, adequate depth of substrate), *Hygrophila polysperma* and *Hygrophila corymbosa* (rich substrate, regular iron supplement, strong lighting) can be grown in a moderately brackish water tank with a specific gravity up to 1.003 along with the mangroves. Mildly brackish water natives (1.000 to 1.005) include java fern *Microsorium pteropus* (low light, wood substrate), *Crinum calamistratum* and *Crinum pedunculatum* (add laterite to substrate, needs lots of light), *Bacopa monnieri* (strong light, frequent iron supplements), and *Cryptocoryne ciliata* (strong lighting, rich substrate).

In terms of equipment beyond what you probably already have, you will need a hygrometer or a refractometer. Although it's moderately expensive, a refractometer is more accurate and so much easier to use that it's worth the extra change. Plastic, stainless steel, or ceramic components must be used instead of typical metal pieces, due to the corrosive nature of salt on metals.

These are some of the fish that can be kept in brackish aquariums: guppies and mollies, some cichlids, juvenile *Monodactylus* species and scats (they need higher levels of salt as they mature, however), Figure 8 puffers, and those remarkable jumpers, the archer fishes (be wary of specimens that show extensive, persistent body gray instead of the high contrast silver-white and black coloration, as the grayness may have been caused by osmotic shock from being dumped in freshwater), some mudskippers, the *Anableps anableps*, and some rainbowfish. Spiny eels, some gobies such as the bumblebee goby, some killifish, the wrestling halfbeak (*Dermogenys pusilla*), pipefish, and orange chromides can all be considered for brackish tanks. Note that not all of these fish can live in all levels of salinity; and there are some marine fish that can live in these brackish tanks, such as some of the damsels. Another aspect of brackish water fishes is the tremendous range of sizes among the fishes. Some mature at one inch long, but others can reach a foot or two in length (or height) and all too often need half a dozen buddies to remain healthy.

The author of the above, soon-to-be-published book on brackish water fishes, has a thorough FAQs page on the subject of brackish tanks at <http://homepage.mac.com/nmonks/aquaria/brackfaqpart1.html> ■

## Conservation News – Federal Partnership Grants

*US Fish and Wildlife announced some of the grants given to organizations and individuals in a partnership arrangement to protect flora and fauna that need help to survive.*

Excerpts from USFWS newsletter:

The **cave crayfish** will be helped by habitat reconstruction and toxic cleanup in Washington County, Arkansas. Partner: Nature Conservancy, Arkansas chapter, \$20,748. The cave crayfish is one of the rarest in the world.

California Audubon's Kern River Preserve will develop predator proof ponds for the **Southern Pacific pond turtle**, a federal and state species of concern and the only native turtle in the Pacific states. \$26,215

Mattole River Headwaters Endangered Species Habitat Restoration Project – (application by Mattole Restoration Council) - Humboldt and Mendocino Counties, California – (\$109,200) - The project will benefit

aquatic species along the entire stem of the Mattole River and estuary by treating 183 sediment sources within the stream.

Private Lands Habitat Enhancement for Riparian and Grassland Species At-Risk in Colorado – (application by Rocky Mountain Bird Observatory) – Elbert County, Colorado - (\$50,099) – Rocky Mountain Bird Observatory will work with two ranchers in eastern Colorado to restore riparian habitat that transects shortgrass prairie, which will benefit numerous bird and fish species, including the **Arkansas darter**.

Stewart Creek At-Risk Species Habitat Restoration Project – (application by Comanche Pool Prairie Resource Foundation) – Barber County, Kansas – (\$90,817) – The Comanche Pool Prairie Resource Foundation will partner with two ranchers to restore 14 miles of riparian habitat for the **Arkansas darter and red spotted frog**.

Maries River Watershed Restoration for private landowners and Niangua darters - (application by private landowner) - Osage and Maries Counties, Missouri – (\$85,000) - The Maries River Watershed Landowner Committee will implement technically and socially accepted best management practices within the Maries River watershed to benefit the endangered **Niangua darter** as well as 12 other at-risk species such as **plains topminnow, grotto salamander, and black sandshell**. The Niangua darter only occurs in eight small basins of the Osage River watershed in southwest Missouri.

Paint Rock River (application by The Nature Conservancy) – Monroe County, Alabama and Jackson County, Mississippi – (\$190,000) - The Nature Conservancy proposes to work with two private landowners in the upper Paint Rock River watershed to enhance approximately 1000 feet of riparian habitat to benefit imperiled fish and mussel species. **Five rare fish species** are also expected to benefit, including the endangered **palezone shiner** and the threatened **snail darter**.

Mussels and Darters (application by Wildlife Forever) – Lawrence and Wayne Counties, Tennessee; Grant and Rapides Parishes, Louisiana; Franklin County, North Carolina – (\$35,600) - International Paper and Wildlife Forever will partner to protect and enhance two federally-listed aquatic species on lands owned by International Paper. The project will conduct slab rock habitat enhancement and reintroduce the federally-endangered **Boulder darter** to Shoal Creek, Tennessee.

Trans-Pecos Wetland Habitat Project – Constructed Wetlands for the Conservation of Endangered Species and Migratory Birds - (application by Organic Aquaculture Institute, Inc.) – Pecos County, Texas (\$216,714) – The Organic Aquaculture Institute, Inc. will provide important brackish water wetland habitats near the Pecos River to benefit the **Pecos pupfish**, and **Pecos gambusia**.

(Grant award amounts may be the sum of partner funds and government funds.) ■

## Summary of Meeting Last Month –



Photo by Lauro Seijo

**Topic/Speaker** was United States Fish and Wildlife officer, Steve Talley, speaking about importing and exporting fish. He told us that the limit of fish or fish eggs that could be imported per person for personal use is seven individual fish or eggs, irrespective of species (caviar falls under a different law). He reminded people the fish must always be declared and that declaring them to Customs was considered to be declaring them to the USFWS and California Fish and Game as well. The USFWS enforces state laws as well as federal laws as far as import and export of animals goes. (Trivia: I was once told in a hazmat responder class that no law officer has more power and fewer restrictions for its use than a game warden.)

Talley said that the most common import problem is not having a permit from each country the fish stops at on the way to the United States, as well as one from the United States.

Another common problem is the country of origin may legally export a fish, but the United States does not allow its import (all assurances of the exporter notwithstanding). His recommendation is to get a commercial license if you intend to bring in more than seven fish and, as a commercial or individual pet importer, to give the USFWS a call to ask what you can / cannot do, what forms are required, etc.

Illegally imported animals are confiscated. Some are promptly destroyed, such as snakeheads, due to their threat to indigenous fishes should they be released into the wild. Many fishes, however, are entrusted to zoos or public aquariums (USFWS retains title, as the animals are evidence in a criminal case). Currently, most of the public institutions in this region are full up of such animals, so the next course of action for the USFWS is to entrust them to members of hobbyist clubs for safe-keeping. The offspring of such evidence animals are usually classified differently under CITES and similar treaties or laws; some may be traded while others must be kept but their (i.e., the second generation) offspring can be sold or traded. Mr. Talley asked for and was given a club roster so he could contact hobbyists should he need to place confiscated aquatic animals.

One other point Talley wanted to make is that the target of the USFWS is criminals, those people who exploit endangered or vulnerable animals, especially those whose greed or negligence results in horrible transport conditions and/or mass death. USFWS recognize hobbyists are interested in the health and survival the animals, and the wildlife service is happy to help hobbyists navigate the legalities.

**General meeting** – Several speakers have confirmed for the rest of the year, including Rusty Wessel (as in *Theraps wesseli*), Chuck Rambo, Charles Clifford, and Bill Thompson, koi club president, who will be giving a presentation on how to build a pond. Tom Varin brought a variety of pastas. He posted the prices for pasta and sodas, and people are politely paying for their lunches now (thanks!).

**Board meeting** – Brian Downing requested Rusty Wessel be reimbursed for his plane fare (approved). Ron Estrada volunteered to full the Vice President position, and the offer was, of course, accepted. Pauline Jackson was reinstated as Treasurer, as John Skolic remains unable to fulfill the duties of the position because of health issues, in spite of his best intentions. Both club laptops now have the auction program up and running. After considerable effort, Brian was able to get the program to work by installing MS Access 97 and uninstalling the current MS Access version. Pauline notified us that the September 10th meeting (on the second Sunday due to holiday conflicts) will be held in the small room, “Harper”. ■

<b><u>Membership News</u></b>			
<i>Member Gossip</i>	<i>New Members – Welcome</i>	<i>Renewing Members – Thank You</i>	<i>Memberships due this month</i>
	<b>Tom DeRosa</b> of Rancho Cucamonga (No. 353) <b>Barry Wallerstein</b> of Laguna Hills (No. 354)	Robin, Bill Arostegui Mike Khalid Harold Lieberman John Pitcairn Phil Rodriguez	Tim Adams Ron Estrada Fernando Rodarte Norman Brown
		<i>Memberships due next month</i>	
		Don Mackey, Maria Blair Chuck Mateo Victor Tongco Ken, Eva Hengstebeck	Norman Brown Joe, Esther Candelaria Rino Olivares Scott Kroeger
<i>Two months past due – no more newsletters will be sent</i>		<i>One month past due – this is last newsletter of your membership year</i>	
Jerry Robinson Bruce Wilson	Ron Hongo	Larry Gentry	

## When and Where the COAST Club Meets

*COAST meets the first Sunday of the month from 1:00 to 5:00 p.m.*

Meeting agendum:	12:30	Board Meeting
	1:00	Meeting begins; general announcements
	1:30	Presentation begins
	2:45	Auction begins
	4:15-4:30	Auction usually ends; check-out begins
	5:00-5:30	Vacate the room

### **Scheduled meeting dates are:**

May 7	Topic: Quarantine Procedures	September 10	Topic: Charles Clifford, Angels
June 11	Topic: Legal Import and Collection	October 1	Topic: Chuck Rambo, African Adven
<b>July 2</b>	<b>Topic: TBD</b>	November 5	Topic: Bill Thompson, Building Pools
August 6	Topic: Rusty Wessel, Cent Amer Fish	December 3	Topic: TBD

We meet at the Costa Mesa Neighborhood Community Center at 1845 Park Ave, Costa Mesa 92627; usually in the Victoria Room, alternatively in the Harper Room. The Center is a dark brick building between the fire station or library and the Lion's Park. The closest large intersection is Harbor Blvd. and 19<sup>th</sup> Street.

## Speaker Lineup *Brief description of confirmed speakers this year*

*Brian Downing*

**August 6th Speaker: Rusty Wessel** Rusty Wessel maintains over 8000 gallons of freshwater aquariums in his state of the art fish house. He has been on over fifty collecting trips to a variety of locations including Africa, Belize, Costa Rica, Cuba, Guatemala, Honduras, Panama and Mexico. Considered by many to be the ultimate collector, he has introduced many new species to the aquarium hobby. Rusty's articles and photos have appeared in a wide distribution of specialized aquarium publications including Tropical Fish Hobbyist.

**September 3rd Speaker: Charles Clifford** Charles has been breeding angelfish commercially for years, supplying many local fish stores. You've seen some of his beautiful fish bring top dollar at our auctions. He'll share his experience in breeding and raising angelfish and maybe a few secrets!

**October 1st Speaker: Chuck Rambo** Chuck Rambo has been active in the American Cichlid Association since it was founded in the late 1960's. He was once President of the local cichlid association before moving to Northern California and is now active in the Pacific Coast Cichlid Association. He has worked tirelessly to forward the understanding of cichlids and to preserve those in danger of survival. He has a vast store of knowledge and experience about all kinds of cichlids and how to take care of them.

**November 5th Speaker: Bill Thompson** Bill Thompson, President, Koi Club of San Diego, will talk to us on building a backyard pond. We'll probably learn quite a lot about koi too! Don't miss this one!

## Board of Directors



Brian Downing Pauline Jackson Rahul Kumar Ron Estrada Ron Jackson Scott Kroeger Steve Ehrlich Tom Varin

<p><b>PRESIDENT</b> Brian Downing  <a href="mailto:briandowning@msn.com">briandowning@msn.com</a>            858-759-4841</p>	<p><b>EDITOR</b> Charlotte Marelius  <a href="mailto:rcmarelius@earthlink.net">rcmarelius@earthlink.net</a>            818-360-7102</p>	<p><b>DIRECTOR</b> Ron Estrada            (email)            949-488-8082</p>
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<p><b>SECRETARIES</b>            Recording: Ron Nash            Corresponding: Mamie Nash  <a href="mailto:coast@ronaldvnash.com">coast@ronaldvnash.com</a>            714-226-0045</p>	<p><b>MEMBERSHIP</b> C. Marelius  <b>AUCTION CHAIR</b> Ron Nash</p>	<p><b>AUCTIONEER</b> Duncan Mahoney  <a href="mailto:dmahoney@usc.edu">dmahoney@usc.edu</a>            310-391-3704</p>

## Kid's Corner – a Connect the Dots Puzzle

Some people enjoy watching this shiny  
orange pet swim around in a tank.

What is it?

