



Why did the snail cross the road? - I don't know but I'll let you know when it gets here.

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Do you have an area of interest you love to talk about, or find yourself answering a lot of questions about from friends or forum members, even total strangers? Please tell me about it - I'd love to include your article. And if writing's not your thing, let me interview you, or just give me the relevant facts and let me write the article. For this newsletter to be full of great information I need your expertise. I know nothing about discus breeding, setting up a fowlr tank, or CO2 dosing, to name only a few. Send your email to newsletter@ovas.ca or PM me on the board.

The Ottawa Valley Aquarium Society (OVAS) is a non-profit, educational, and recreational organization. It has four main objectives:

- to further the study of all forms of aquatic life,
- to promote interest, exchange ideas, and distribute information concerning the hobby,
- to encourage breeding and displaying of aquatic life,
- and to work toward the conservation of endangered species.

OVAS is a member of the Canadian Association Of Aquarium Clubs.

OVAS club meetings are held at **7pm on every 4th Monday** of the month. Everybody is welcome! Meetings take place at the **J.A. Dulude Arena - Mel Baker Hall**, located at **941 Clyde Avenue**.

Please note that there are no meetings in December (xmas), July and August (summer break).

Well, summer is definitely over

Time to spend more time indoors again with our tanks and maybe a little reading. I am thrilled to present you our very own Melody Mckinnon's wonderful article about herbivorous snails on page 3. And to keep within the snail centric theme, on page 6 you'll find my experiences with their counterparts, the carnivores.

Also with the end of summer the new club season has begun, our Garage Sale was already a success and will be repeated next year, and the newly elected executive is working full steam to make the coming year interesting and enjoyable for all members. We'd like to take this opportunity to introduce ourselves and our hopes for the season ahead, starting with a word from our President, Matt Séguin (mseguin): "Welcome to the 2009/10 OVAS season, and I hope you enjoy what we have planned for you this year. But don't just sit back – a club like this is only as good as its members, and we need your participation. So, give us your ideas, feedback and hands-on help, and we'll have a great time!"

With your participation, Errol Choo (charlie), our Vice-President and Program Director, is convinced that we can "make this club the best in Canada & probably the world as far as aquatic clubs go." He encourages everyone to "purchase a yearly membership to keep this wonderful club growing" and stresses how important the encouragement is that a community can give. When he first started out he had "no clue about the finer art of fish keeping". He had never tried plants until he discovered OVAS in 2004 and received invaluable help from several members. Just look at his tanks now.

Communication is key to the success of any venture that involves more than a single individual. Our Treasurer, Jennifer Sutherland (RoxyDog) hopes to reintroduce a sense of community to the club and urges you to "tell us what you'd like to see happen. Involve your families and especially kids, participate in discussions and throw forth ideas. While we might not be able to realise every suggestion as you make it, your ideas inspire us and give us direction."

Peter Garneau (garnpet), the eminence grise behind the smooth organisation of our auctions, who used his kids as an excuse to get back into the hobby, would like to point our Giant Auction out to you as "the big event of the year" and urges people "to get involved and make it a success. I hope that the auctions this year will bring some interesting items to the club membership."

Alysa Farrell (nerine), who takes care of Corporate and Public Relations was born into the hobby, and her son already loves his own tank. She is looking for members to become sponsors for the photo of the month contest and hopes to have more club members participating in events and contests and to draw more members out to the meetings.

Librarian, Joyce Landry (washefuzzy) keeps introducing new books into our library (Please donate your newer used books!) and is committed to making them more accessible to members. She brings topical books to meetings for members to look through and to borrow for a month. The service is free, your \$5 deposit will be refunded to you upon return of the book.

Also waving a welcome are our busy Webmaster and Secretary Robert Hemp (fischkopp), Membership Chair Anton Maslov (zima), BAP Chair Mark Warmington (markw), and our Social Convenor and Happy Tummy Expert Wayne Smith (wandmangels).

As for me, I'm very excited about my first newsletter and hope you will find it interesting and relevant for yourself and the critters you keep. If you are leaning back now thinking 'Snails? Why couldn't it have been about ... (insert your special interest here)?', tell me what you would like to see here in the future. I can't read minds, you'll have to tell me.

Anja Krebber

The Plant-Eaters that Don't Eat Plants



"How can a herbivore not be a plant eater?" confused hobbyists ask, "Isn't that an oxymoron?"

It is a contradiction at best, which is why I prefer the phrase "These snails do not eat healthy plant tissue."

The confusion begins when a trusting hobbyist adds a plant-safe snail to their beautifully planted tank, only to discover mysterious holes in their prized specimens, floating leaves and nibbled edges. Their plant-safe snails stare at them innocently while appearing to enjoy a plant snack. There's only one thing to do! Write an angry e-mail to that lying scoundrel, Melody!

To which I reply that a scoundrel I may be, but lying has a way of biting one on the anal fin so we avoid it. "If the snails are eating your plants, it's because the plants have deteriorated enough to allow them to do so."

I like the members of OVAS so I'm going to share a little tip here that could save your life - **never** tell a planted tank enthusiast that their plants are not in perfect health. They threaten to drown you in snail slime... and that's if they're in a good mood! I am informed in no uncertain terms that they have been tending planted tanks for 102.5 years, they win shows with their eyes closed and they supply half of Ontario with cuttings every week, "My plants are just fine, thank you very much!"



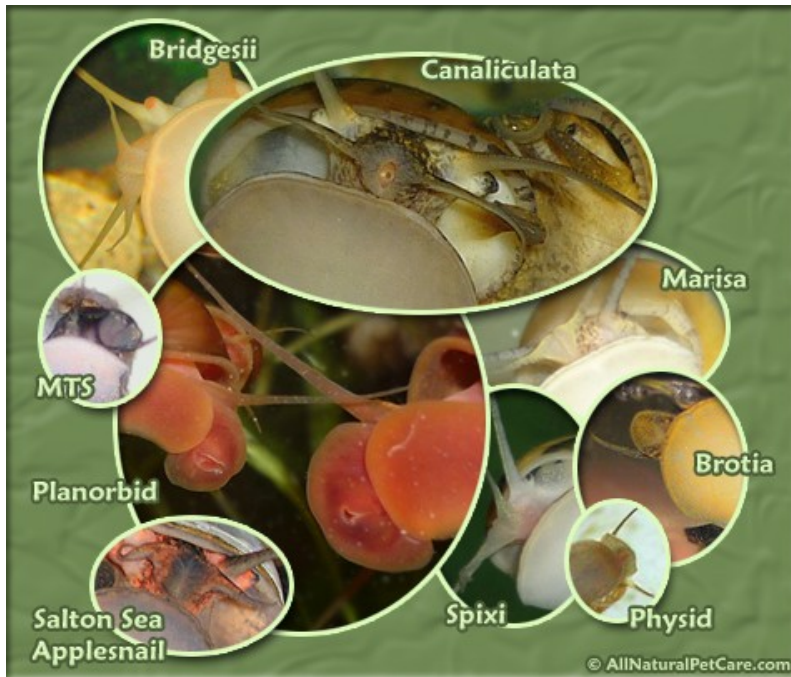
I don't pretend to be a master plant grower, but I am very knowledgeable in the art of killing them. This kind of knowledge can serve a person well in these cases. Some plants are easier to kill than others. They need precise amounts of light, a set schedule, carefully formulated fertilizers, Co2, etc. To further complicate matters, many of these plants have very thin leaves to begin with, so it doesn't take much for the tissue to break down. The plant can look wonderful, it can grow like a fairytale beanstalk, but the tissue is still soft and soft tissue is what snails like best. I have seen this in my own tanks - they'll nibble at a plant species in one tank whereas in the higher light 90G, they don't touch the same species.

There are many misconceptions about which snails will or won't eat plants, but the fact of the matter is, it isn't will or won't at all - it's can or can't. All herbivorous snails would love to eat your plants - they're veggie

freaks. If they could, they would, but they can't, so they don't. It is said that *P. diffusa* (formerly known as *Bridgesii*) will starve to death in a planted tank if they are not fed anything else. They are known as non-plant-eaters, yet if you blanch some vegetables for them they'll speed by four dozen of your prized plants to scarf it down. They don't eat healthy plant tissue because they can't, but they loooooove eating any plant soft enough for them.



The Internet is responsible for some of the confusion, including the odd identity crisis. Someone will read that the 'Giant Ramshorn' eats plants and assume all 'Ramshorns' eat plants (darn those common names anyways). Then they tell two friends and so on - it's the way of the Internet. However, 'Giant Ramshorns' are Marisa's and 'Ramshorns' are Planorbid - two totally different species. Marisas are in the middle - I can keep Anubias and other tough plants with Marisas but in general, they are a plant-eater. Known Planorbid species cannot eat healthy plant tissue.



I don't want to bore you with technical details, but basically it comes down to the mouth size, the teeth size, and probably most importantly, the strength of the jaws. It's the jaws that they use to cut pieces off of vegetation so they can swallow it. *P. canaliculata* (Cana Applesnails) have very powerful jaws and all of the equipment to compliment them. They can mow a tank in record time, a talent which has them ranked as one of the ten most **unwanted** invasive species in rice territory. They are prohibited or restricted all over the United States, as are other plant eating snails. You can bet if the hobby plant safe snails were a threat, they'd be on the hit list too.

If you're a slime geek like me and you would like to know more about how Applesnails eat, Stijn, over at Applesnail.net has more detailed information (including animated diagrams & a movie):

<http://www.applesnail.net/content/anatomy/digestion.php>

If you think you may have some delicate/soft plants that a 'plant-safe' snail will be able to eat, by all means avoid them. They will never mow a tank like a Cana will but if the plant tissue in delicate plants isn't 100%, they may be able to nibble away at those. Other creatures, such as Ancistrus Pleco's or *C. siamensis*, will behave in the same manner. Years ago I had a friend swear up and down that Bristlenose Plecos were eating holes in the leaves of his beloved Sword plants. Now I know why! Those holes used to be soft spots.



There is one snail that you can be sure won't eat your plants no matter what shape they're in and in fact, will eat other snails for you - the carnivorous Antentome Helena.



To ensure that you're armed and dangerous when protecting those breathtaking planted tanks of yours, the following common hobby snail species will **not** eat healthy plant tissue:

- Anentome helena - 'Assassin Snail'
- Asolene Spixi - 'Spixi Applesnail'
- Known Brotia species - 'Thorny Snail'
- Melanoides tuberculata (MTS) - 'Trumpet Snail'
- Melanoides granifera
- Neritidae - 'Nerites'
- Physid - 'Pest Snail' or 'Pond Snail'
- Planorbid - 'Ramshorn' or 'Pest Snail'
- Pomacea Bridgesii - 'Spiketop Applesnail', 'Applesnail' or 'Mystery Snail'
- Known Tylomelania species - 'Sulawesi snails'
- Known Viviparid species - Includes 'Japanese Trapdoor Snails' and 'Zebra Snails'



Now we know our plants are safe, but look for my next article about the 'airline tube eating Applesnails'. Until then, keep sliming!

I would like to take this opportunity to remind you to NEVER release unwanted snails (or any aquatic creatures/plants) into the wild. If you cannot find homes for them, the responsible thing to do is humanely euthanize them. Thank you!



Author Bio: Melody McKinnon is a 'lifer' hobbyist - always has, always will. She was one of the first Canadian hobbyists to keep and breed many species of Applesnails, and her bloodlines run through most Canadian hobbyist's snails today. She claims writing as her only natural born talent, with an addiction to learning taking her pen through hobby periodicals, Microsoft support documents, and Pet Food Industry magazine contributions. Her formal education is in Business Management Studies with a specialty in eCommerce, Marketing & Design. The launch of AllNaturalPetCare.com and several natural, low-processed pet food lines is currently keeping her busy and out of trouble... most of the time.

Assassins - Experiences with Anentome Helena



Although von dem Busch already described a *Clea helena* in 1847, assassin snails did not hit the aquarium market until about 2006, when the first specimen showed up in German pet stores. The Cleas belong to the Buccinidae family and are divided into two subgenera, *Afrocanidia*, the African species and *Anentome*, the Asian species. *Anentome helena* lives in a range of habitats in south-east Asia, from fast flowing rivers to lakes and ponds.

I got my first assassin snails in May 2008. I had read about assassin snails as the ideal solution to snail problems in tanks too small to support a pack of loaches. And while my 25 gallon blackwater tank wasn't exactly covered in snails, their numbers were definitely on the rise. I bought four assassin snails, pretty little things with a ridged conical shell, chocolate brown with light yellow stripes. They were maybe a centimeter long. I took them home, plopped them in my tank and waited. For about a week nothing happened. Then, empty physa shells started to appear. The assassins had begun to assassinate.

I would have liked for them to breed, but they didn't lay any eggs. The statistician in the family assured me that my best chances of having both male and female snails (yes, they're dimorphic and, for me at least, impossible to sex) would lie in numbers of at least eight, so I went out one hot Summer day and bought another four. Lo and behold, some time later, I found a handful of eggs on a piece of wood, little off-white dots in milky square sacks. Some more appeared here and there on plant leaves. In February I picked 12 juvenile snails out of the tank and that was it. No more eggs appeared and no more babies.

My adult snails had grown to about 15mm and had made quite the inroad on the pest snail population. They seem to prefer *Physa*, *Lymnea* and *Helisoma*, the little mini ramshorn snails, to MTS. But they did get to the Malaysian Trumpet Snails eventually, after they'd utterly eradicated the former in my tank, and I've found empty MTS shells that were quite a bit larger than my little assassins.

By now I was thoroughly intrigued and set up a little 5 gallon tank specifically for my assassins. They seem to like higher GH and PH levels, but did well enough in my South American tank which is on the low side for both. For substrate they should have sand or very fine gravel that they can bury in. Sometimes they lie in wait for hours and days with just their siphon sticking out, ready to prey on any unlucky snail that happens by. But they also actively hunt all over the tank. They don't go after their own, but I wouldn't trust them with any other snail species, even larger ones. A friend assures me his assassins love to snack on young apple snails. They also enjoy any left-over fishfood that contains animal proteins. If you feed a lot, chances are you'll have happy and fat

assassin snails that don't do much to alleviate your snail problem.

Once they caught their prey, they hold the shell with their foot, stick their incredibly long (I've seen 5mm) proboscis as far as possible between the prey's shell and operculum and start dinner. This proboscis is not the siphon you'll see sticking out of the sand, but the snail's mouth which is only extended during feeding. When the prey's shell is transparent you can actually see the twitching of the proboscis when bites are ripped off.

Depending on the size of both prey and predator, an assassin snail eats about one snail every two days. I've found shells of larger pest snails that have not been cleaned out completely, so they don't feed until there is nothing left, but only until they are full. I've seen juveniles take up where the adult left off. A friend tells me he has seen assassins feed on a dead fish, but very diffidently. They did, however, polish off a set of cory eggs!

Though I have found information that claims sizes of 2.5 and even 3 cm, I cannot verify those numbers. My largest assassin snail to date is 18mm long. The yellow stripes tend to get smaller or even disappear completely as the snail gets older; the shell looks more rugged, and often the apex wears away. Life span is given with 2-5 years by the Aquarium Wiki. None of mine have died yet, and considering their size when I bought them, I expect them to have been at least six months old then, so they are going on two years now.

My snails don't lay eggs in temperatures under 25-26C and seem most active at around 28-29C. Then, two or more snails can be found sticking together for quite some time. Yup, they're a social lot. They lay single eggs, only a handful every month, so there's little danger your aquarium will be overrun with assassin snails instead of the pond snails you were trying to get rid of. The eggs take 3-4 weeks to hatch, then the young snails immediately disappear in the substrate and aren't seen again for a couple of months. Mine tended to resurface at a size of about 4 mm.

To eradicate pest snails from your tank, you would probably need something like two assassins per 5 gallons, but of course this depends very much on water parameters and how heavily your tank is infested. You'll need a little patience - the assassin snail solution is not a quick fix, but they will eventually get there. To give you an idea, I emptied a 10oz jar of MTS into my 25 gallon tank in March, and by June my eight assassins had eaten all but a few babies which, I think, were too small to accommodate the assassins' proboscis.

Once your pest snails are gone, don't forget to feed your assassins. They make very pretty pet snails and won't touch your plants.

Anja Krebber

Upcoming events

October

26th, Monday, 7pm - General Club Meeting with Dick L AU

OVAS is pleased to present Dick L Au at our October gathering. Dick will give us insight into the world of Discus - a fish that has driven the aquatic hobby like no other.

Dick is a long time hobbyist & breeder & well published author in the Discus world among others. He will have a few copies of his books available, **perfect time to get an autographed copy**. So mark your calendars for this once in a lifetime feature.

We plan on some Halloween decoration so feel free to dress up accordingly.

Admission is free for card carrying OVAS members, non members/visitors pay \$5.00.

November

14th, Saturday, 11am - Workshop: Tank Drilling

Learn how to drill a tank yourself. This is **your only opportunity** to get first hand knowledge of how to drill your tank for the 2009-2010 season, so you might want to make every effort to attend.

We need a volunteer tank to drill one hole only, first person to volunteer gets a free hole drilled in his tank. (Please note OVAS or the facilitator is not responsible for any damage to the tank, you are volunteering your tank at your own risk.)

Drill instructor: Pierre AKA groupie02

Where: J.A. Dulude arena (Mel Baker Hall) 941 Clyde Ave

Duration: approx 1 hr

Admission is free for card carrying OVAS members, non members/visitors pay \$5.00.

Please indicate your intention of attending, so we have an idea of how many will be present.

23rd, Monday, 7pm - General Club Meeting with Frank Aguirre

On his second visit to OVAS, Frank will explain to us the basics of salt water aquariums. Stay tuned for more details.

This is your last chance to get your ticket for the Christmas Banquet!

28th, Saturday, 5pm - Christmas Banquet

Join us for the 2009 Christmas Banquet. **Dress to Impress!**

Lots of fantastic food and desserts

Dinner will include **roast beef/turkey, roast potatoes, veggies, desserts and more**

Live entertainment depends on ticket sales!!!

Please let us know the number of people in your group, so we can prepare food accordingly

Tickets will be available at the October and November general meetings: \$10/member or \$30/family of 4, \$15/Non-member or \$45/family of 4

If you haven't purchased your tickets by November general meeting you will not be able to attend.

Many thanks to our sponsors: Aqua Valley, Aquarium Shop, Big Als Aquarium Services, Critter Jungle, Fish Tail Aquariums, Forty Fathoms, La Niche, Marinescape Aquarium, Ottawa Inverts, Ray's Marine Livestock & Aquatic Supplies, Reef Gate and Worldfish Canada.

Thank you to Focus Financial Services and Ray's Marine Livestock & Aquatic Supplies for sponsoring the free memberships for our September draws.