# Welcome to the <u>Species Care Series</u> Presented by the Alaska Herpetological Society

We hope you enjoy this free educational class! Presentations will be held on the first Saturday of each month from October through May. There is a live video of this presentation on the Facebook page, and the slides will be available to view from the website afterwards.



Are you looking to improve care of exotic pets in Alaska? Join Us and support more events! How to become a member?

https://www.akherpsociety.org



https://www.facebook.com/akherpsociety



# AHS Species Care Series presents-Pond Slider Turtles (*Trachemys scripta ssp.*)







Pond sliders, especially red-eared sliders, are considered to be the most popular pet in the world!



## **Species Facts**

There are three subspecies of pond sliders: red-eared sliders, yellow-bellied sliders, and Cumberland sliders. These three have different physical traits but do have the same care requirements.

- Native to southeast United States
- Semi aquatic- inhabits ponds, lakes, swamps, streams, and slow-flowing rivers but requires access to dry areas as well as water.
- Diurnal- awake during the day
- Grows to a shell-length of 12", with reports of females growing larger!
- Average of 20-30 year lifespan, with 40+ years not unheard of for well cared for turtles!

The red-eared sliders is only native to southeastern US, but has established invasive populations all over the world!

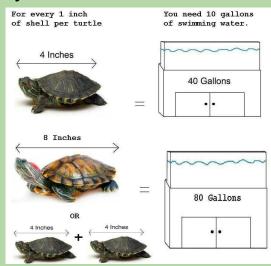




#### **Enclosure Sizes**

Tank size does **not** limit a turtle's growth. This is a common myth that is not true.

- In general, your turtle should be given a minimum of 10 gallons per 1" of shell- a 4" turtle should have at least 40 gallons of water, 8" turtle should have at least 80 gallons, ect.
- The depth of the water should be twice as deep as the turtles shell length; a 4" turtle requires at least 8" water depth.



Keep in mind- these are the *minimum* requires for just the water where turtles spend most of their time; land is in addition to this. Bigger is better for sliders!



# **Enclosure Types**





- Glass aquariums-smaller sizes widely available, but expensive
- Waterland tubs-preformed tub that has land portion already set up
- Preformed pond liners-easy to get at most home improvement stores
- Livestock water tanks-locally available and very durable
- Above-ground ponds-available online, can ship easily, and low cost





#### Water Filtration

Turtles have a high bioload (amount of waste per animal), and they urinate and defecate in the same water they eat and live in. The filter should be rated for at least 2-3x bigger than the volume of water you have for your turtle.

Here are a couple of filter brand suggestions that are widely available in Alaska: Marineland Magniflow 360- rated for 100 US gallons, good for up to 50 gallon turtle tank



Fluval Fx6- rated for 400 US gallons, good for up to 200g turtle tank

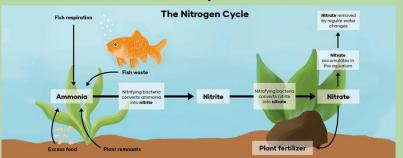




#### Aquarium Maintenance

Aquariums will go through the process of cycling when first set up, this can last 2-4 months. During the cycling process, it is extremely important to keep up with large weekly water changes if you have your turtle already housed in it. Use a liquid test kit to check your water parameters once or twice weekly. When there is enough beneficial bacteria in the filter, your water parameters will read as:

- Ammonia 0ppm
- Nitrites less than 5.5ppm
- Nitrates less than 40ppm
- pH between 5.5 and 8
- Chlorine should always read 0



Even after the establishing a cycle, water changes should still be done weekly to maintain good water quality. Remember- your turtle eats in the same water that it defecates in. Even if water is crystal clear, continue to change 20-25% of the water weekly and 50-75% once a month.

Some items that can make water changes easier are

- Python No Spill Clean and Fill
- Wet vac
- Drill pump or submersible water pump









# Land/Basking Platform

Your turtle's dock needs to be big enough for your turtle to be completely in and out of the basking spot, and tall enough to mount the lights 10-11" away in order for the hot spot and UV to spread far enough to cover your entire turtle.











## Temperatures and Heating Elements

- Hatchling sliders up to a year old require a water temperature of 78-82°F and a daytime land basking temperature of 88-93°F
- Sliders over 1 year old require 74-76°F water temperature and 84-89°F daytime land basking temperature







It is critical to use a flood bulb and not a "basking spot" bulb in order for the heat to spread far enough to cover your turtle's entire body and shell. The heat bulb should at least be 10 inches above the basking platform to allow the heat to spread far enough to cover the entire turtle







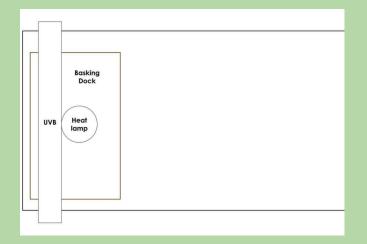
Water temperatures should never drop below 72°F, cool temperatures will negatively impact your turtle.



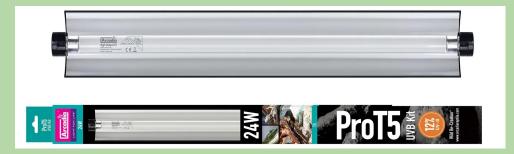
# Lighting and UVB

Being diurnal, awake and active during the day, UVB and daylight are critical to your turtle's health.

A linear 10% or 12% UVB bulb should be used to provide your turtle with a UVI of 5.









#### **Enclosure Clutter**

- Large smooth rocks, fine sand, or bare bottom
- Live or fake aquarium plants
- Aquarium safe large resin decor







Aquarium safe driftwood





#### **Unsafe Items**

 Gravel- turtles can/will eat small rocks that cause impaction. Bare bottom tank, fine sand, or large stones only



 Basking spot bulbs- most basking bulbs are spot bulbs, which have a foil backing to concentrate the beam to a smaller area. Spot bulbs are not suitable for turtles because the beam will not cover the entire turtle.







 Glass thermometers unsuitable for turtle tank. Glass can break and cause injuries, turtle may even attempt to eat the glass pieces.





 Any compact or coil bulb, colored bulb, or non-light producing heat bulb (ceramic and DHP).
 Compact/coil bulbs are inadequate UVB providers; colored, ceramic, and DHP all disrupt circadian rhythm.

# Feeding

- Under 1 year old should get 50% vegetables and 50% protein
- Over 1 year old should get 75% vegetables and 25% protein







Pellets are recommended daily for turtles under 1 year old and 2-3 times weekly for turtles over 1 year old.

Portion size of pellets should equal about the size of the turtles head.

#### Feed a large shell-sized leaf daily, all ages

Staple items	Turnip greens, dandelion greens, green leaf lettuce, red leaf lettuce					
Moderate use	Romaine, carrots, escalope, kale, endive, mango, papaya,cantaloupe, cuttlebone					
Sparingly/treats	Worms, livebearer fish, snails, crickets, berries, banana, grapes, skinless apples					
Never feed	Goldfish(thiamine kills), tomato, cabbage, spinach, corn, avocado, string or green beans, broccoli, cauliflower, onion, peppers, celery, peas					

Enclosure	\$500-1000+ for a glass aquarium	\$200-500 for other enclosure types(stock tanks, pond liners, ect)			
Heat & Light	Bulbs start around \$20+ea, domes \$10-20ea LED light \$20+	RHP \$50-120. UVB Fixture and bulb \$100. Solar Meter \$265+			
Parameter controls	Digital thermo/hygrometer \$5-20+ea. Manual IR Temp Gun \$20-40. Basic Thermostat \$20-50. Low end HOB filters start at \$30+	High-end proportional thermostat starts at \$120+ Canister filters start at \$80+			
Substrate & Clutter	Expect around \$50-100 or more depending on the set up				
Misc	Aquarium maintenance equipment \$50+				



# Species Temperament and Handling

Turtles are very curious about the world around them and can interact with a variety of enrichment items inside their enclosures!

In general, however, turtles are not an animal that should be handled outside of tasks required for cleaning or health





#### Turtles should not be housed together.

While they generally tolerate being in close proximity to others, they don't prefer to share resources. It's not uncommon for a turtle to get extremely territorial and attack a tank-mate after sharing space for many years even.

# Gender ID and Egg Laying

Turtles can be sexed at 4" shell size and larger. What to look for:

- Males have a thick, long tail that has an even taper. The cloacal opening is close to the end of the tail. Long, thin claws and narrow front hands. Narrow skull, smaller/less pronounced features with a protruding snout.
- Females have shorter tails that start out thick and only taper towards the end. Cloaca is close to the shell. Short, thick claws on wide front hands. Wide skull and neck, short snout, pronounced jaw and strong overall features.





Female turtles can start laying at 5-6" shell length and will lay unfertilized eggs if they have never been with a male. Signs to watch for:

- Restlessness/attempting to escape
- Digging with her hind legs
- Excessive basking
- Poor appetite

#### What to do:

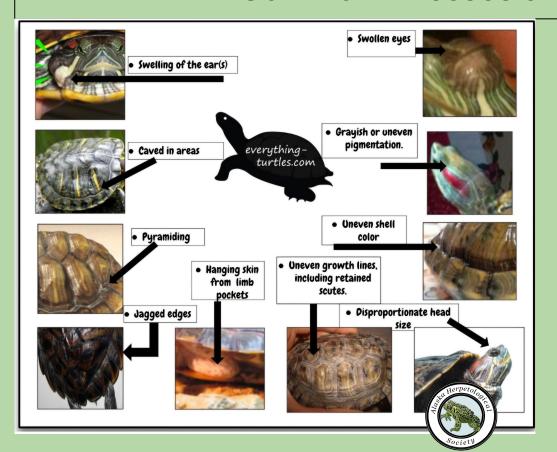
- Get a dark plastic tote
- Fill halfway with 9rganic topsoil and spray to moisten
- Use a basking bulb and thermostat to heat to 80°F
- Place your turtle in and leave her in a low traffic area to lay her eggs
- Provide extra calcium and protein after







#### Common Illnesses and Issues



Like most exotic pets, turtles are masters at masking issues.

If you see anything unusual, consult a vet!

#### Alaska Rescue Stats

Jonathan's Reptiles took in 64 surrenders in 2022.

77% of those 64 surrenders had health concerns.

Of those with health concerns, 53% were surrendered in poor condition, 18% in moderately poor condition, and 29% in extremely poor condition.

30% of the surrenders in extremely poor condition passed within hours or days of being surrendered.

The most significant stat is that 90% of the reptiles surrendered had health concerns <u>directly related to improper husbandry</u>.

Reason for Surrender	#	Health of Surrender	#	Husbandry Related?	
No longer able to care	22	Good	15	Yes	44
Health concerns	15	Fair	9	No	5
Surrendered from AC	10	Poor	26		
Moving/Living situation	7	Extremely Poor	14		
Lost interest	5				
Found	4				
Temperament	1				

Some of the health concerns of surrenders include

- 20 were malnourished or starving.
- 12 had dehydration and/or stuck shed.
- 7 were missing all or part of a limb.
- 6 had mouth rot/stomatitis
- 4 had respiratory infections.





# **Emergency Preparedness**

Loss of power is a factor for Alaska that you have to be prepared, and to be able to evacuate your pet in these situations. You cannot just put a reptile in a bin and take them outside when temps fall below safe levels- under 40°F. They need to be put into something with heat and that will hold heat for them.

An emergency kit consists of a few key items:

- Insulated container such as a styrofoam box or even a cooler
- A reptile-safe heat pack
- A digital thermometer with a probe to monitor temps without having to open the container
- Any inner container such as a kritter keeper, small tote, or pillow case



Some other items to consider adding to an emergency kit are:

- Critical Care, formula depending on your animals
- **Syringes**
- Povidone-Iodine(like Betadine)
- Gauze, swabs, and cotton balls
- Stainless steel tweezers
- Saline Solution
- Vetericyn Plus
- Canned or Vac-sealed bugs for feeding, do not use freeze-dried (if applicable)





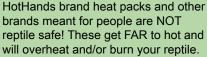




If you are able to heat water, you can use a warm water bottle instead of heat packs and conserve your heat packs for a time when they are the only option.

> brands meant for people are NOT reptile safe! These get FAR to hot and will overheat and/or burn your reptile







#### Questions?

We hope you enjoyed this presentation on helping your pet thrive under your care!



Huge thanks the collective work of Master Herpetologist Noelia Perez!

https://tinyurl.com/4356j3ff





If you have ideas on how we can improve, please let us know! Public feedback is very important.



