

Should YOU rehab raccoons?



Ruby Davis
704-877-3037

Carolina Wildlife Conservation Center

A Wildlife Rescue Clinic

- -Iron Station, NC
- -105 acres of Conservation Land
- -501 (c)3 Non-Profit Organization
- -In/Outdoor Enclosures
- -Huge focus on conservation of land & animals!



What species do we rehab?

- Rabies Vector Species(RVS)

- Fox
- Bats
- Skunks
- Raccoons
- Bobcat



- Non-Rabies Vector Species

- Squirrels (Gray and Flying)
- Opossums
- Eastern Cottontail Rabbits
- Groundhogs
- Beavers
- Otters
- Chipmunks
- Reptiles



North Carolina Wildlife Rules and Regulations

- ▶ “Individuals who do not possess a captivity license for rehabilitation may take temporary possession of injured, crippled, or orphaned wild animals or wild birds, provided they are surrendered to a North Carolina licensed veterinarian or an individual license under this Rule within 24 hours of taking possession of such animals.”-NCWRC
- ▶ It is ILLEGAL to keep ANY WILDLIFE AS A PET or to rehabilitate animals without proper licensing and education in NC!



Natural History

- ▶ Average wild lifespan 5-7 yrs
- ▶ Omnivores
- ▶ Intelligent
- ▶ Females – 1st year (brutal)
- ▶ Gestation 60-75 days
- ▶ 4-5 kits average
- ▶ Altricial
- ▶ Ears open 2 wks; Eyes open ~3 wks
- ▶ Learn to climb with mom 6 wks
- ▶ Weaning 8 wks
- ▶ Foraging with mom 10 wks
- ▶ Fully weaned 12 weeks with permanent teeth erupting
- ▶ Social



Necessities

Pre-exposure vaccines

RVS License

Intake Form

Veterinarian

Supplies

Designated RVS area

Cages for all ages

Resources

 <p>Captivity License for Wildlife Rehabilitation</p> <p>North Carolina Wildlife Resources Commission Regulated Activities Permits Section 1707 Mail Service Center Raleigh, NC 27699-1700</p> <p>Phone: (888) 248-6834 Fax: (919) 707-0292</p>	<p>AUTHORITY STATUTES GS 272.5</p> <p>RULES 15A NCAC 10H .1401-.1406</p> <p>Page 1 of 2</p>				
	<p>PERMITTEE/LICENSEE</p> <p>RUBY MARIE DAVIS CAROLINA WILDLIFE CONSERVATION CENTER</p>	<p>PERMIT NUMBER 20-WR01432</p> <table border="1"> <tr> <td>EFFECTIVE 01/03/2020</td> <td>EXPIRES 12/31/2020</td> </tr> <tr> <td>COUNTY</td> <td>DISTRICT</td> </tr> </table>	EFFECTIVE 01/03/2020	EXPIRES 12/31/2020	COUNTY
EFFECTIVE 01/03/2020	EXPIRES 12/31/2020				
COUNTY	DISTRICT				

TYPE OF PERMIT/LICENSEE: Rabies Species Print Date: 01/10/2020

SPECIES AUTHORIZED: - Mammals, Small - Rabies Species (Bat, Raccoon, Skunk, Fox, Bobcat)

AUTHORIZED LOCATION(S):

CONDITIONS AND AUTHORIZATIONS:

This license authorizes the possession of injured, crippled, or orphaned, native wild animals or wild birds, depending on the categories listed under 'Species Authorized', for the purpose of providing short term care and eventual release in to the animal's natural habitat.

This license does not authorize holding any wild animals or wild birds other than those animals in the process of being rehabilitated for release. Wild animals or wild birds held under the authority of this license are authorized to be held for rehabilitation purposes only and may not be held as pets or for education, exhibition, or scientific purposes.

Rehabilitation activities authorized under this license shall be conducted at the authorized location designated on this license. The licensee shall meet the minimum standards set forth in 15A NCAC 10H. 1402(g)(1).

All wild animals and wild birds undergoing rehabilitation shall be kept separated from pets, domestic animals, livestock, and non-native animals. All wild animals shall be kept in separate enclosures by species. Handling of animals shall be for treatment only.

Wild animals and wild birds undergoing rehabilitation may remain in a rehabilitation facility for no longer than 180 days. If a longer rehabilitation period is needed, the license holder shall notify the Commission in writing.

Wild animals and wild birds shall not be released on property owned by another unless the rehabilitator has written permission dated within the last 12 months from the landowner.

Rabies Species: All rabies species shall be considered potentially infected with the rabies virus. If any human or domestic animal has been scratched, bitten, or exposed to saliva, the fluid that surrounds the brain and spinal cord, or brain and spinal cord material from any rabies species, the license holder shall contact the local Health Department immediately to report the incident.

Rabies Species: Facilities housing rabies species shall be separate from facilities housing non-rabies species. Enclosures within the facility shall prevent escape of the animal and exposure to people, pets, livestock, and other captive or free-ranging wildlife. Exterior caging shall be locked.

Rabies Species: Rehabilitated rabies species must be released in either the county where they were rehabilitated or the county where they were found.

Rabies Species: Records of all rabies species rehabilitation shall be maintained on a form provided by the Commission, and submitted to the Commission within 15 days of expiration of the license or prior to the request for reissuance of the license.

This permit/license is non-transferable and expires at midnight on the above specified expiration date.

ISSUED BY: <i>Daron L. Barnes</i>	TITLE: Section Chief - WI & RAPS
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20-WR01432

Good Samaritan Drop-Off Form



Name: _____ Date: _____
 Address, city and zip: _____
 Phone: _____ Email: _____
 How did you hear about us? _____

Animal Information

Species(s): _____ Date you received Animal: _____ # of Animal(s): _____
 Address found (if different from above) _____
 What is wrong with the animal? Cat/dog attack? Orphaned? _____
 What food or formula has it ate or drank? _____
 Who has touched the animal? Gloves or bare handed? _____
 Has the animal bitten or scratched anyone? _____

I hereby acknowledge that I am surrendering this animal. I understand that I am turning over primary care of this animal to the Carolina Wildlife Conservation Center and am not financially responsible for any services deemed necessary. Care may include medical treatment, transfer to another facility, release, or euthanasia, and will be determined at the sole discretion of the rehabilitator. CWCC is not obligated to give updates/status of the animal to the good Samaritan. I handled the animal at my own risk and do not hold CWCC liable for any injury acquired from the animal.

For Fox, Bats, Raccoons and Skunks only: This animal(s) are rabies vector species. Rabies is an infectious viral disease that affects the nervous system of humans and other mammals. People get rabies from the bite of a rabid animal. It is also possible, but quite rare, for people to be exposed to rabies if infectious material from a rabid animal gets directly into eyes, nose, mouth or wounds of people. If, to the best of your knowledge, no one has been bitten and you acknowledge that you have handled this animal at your own risk, please sign below.

Signature: _____ Date: _____

Yes! I would like to Make a Donation!

Here at Carolina Wildlife Conservation Center we feel strongly about caring for all animals. We provide the best care including but not limited to our time, medications, surgical procedures, food, and housing cost to help these animals. Your Tax-deductible donation will help us continue Rescue, Rehabilitation, and Release of these animals. Thank you!



Donation Amount: \$ _____

Cash Check Venmo Paypal



Safe containment & transport

- ▶ Always treat with respect.
- ▶ Protection!!
- ▶ Thick gloves
- ▶ Towel or blanket
- ▶ Size appropriate container

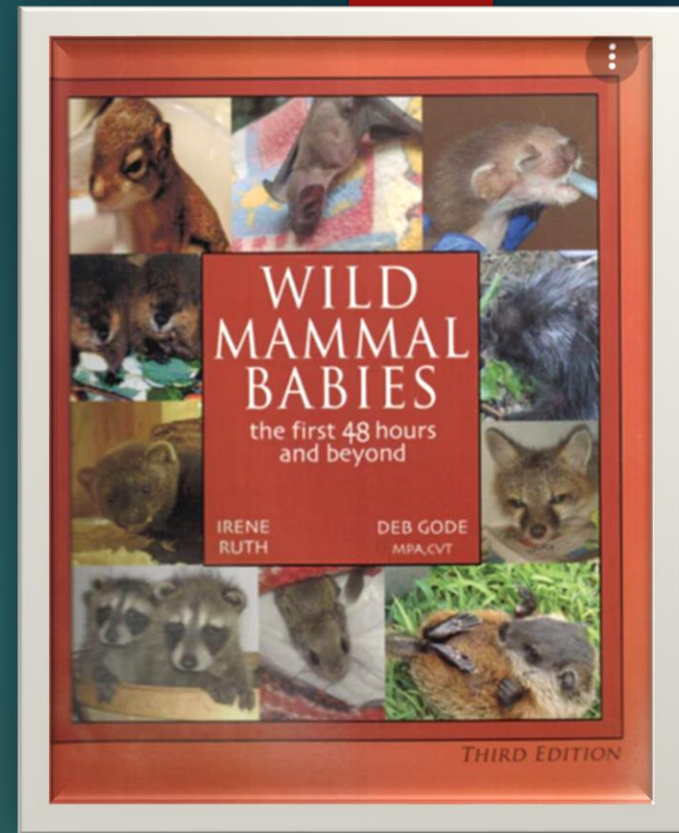


Basic Supplies

- * Reference Books
- * Scales
- * Heating sources
- * Formula
- * Probiotics
- * Electrostats
- * LRS ringers
- * Syringes
- * Needles
- * Bottles
- * Nipples
- * Blankets/Fleece
- * Corn starch



Ready yet?



Basic Medications

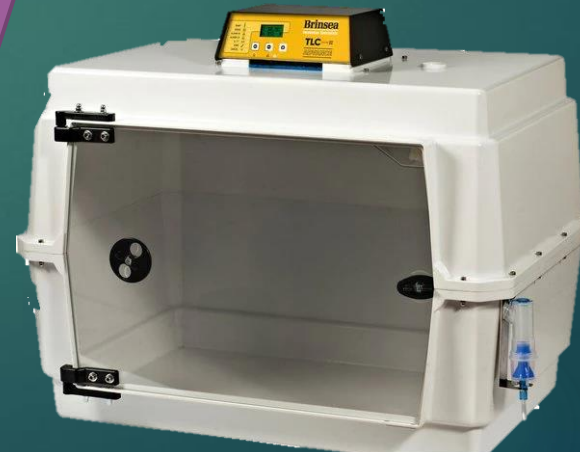
- Pyrantel Pamoate
- Fenbendazole
- Toltrazuril
- Albon
- Capstar
- Enrofloxacin
- Clavamox
- Chloramphenicol
- Veraflox
- **Convenia**
- Metronidazole
- Oseltamivir (Tamiflu)
- Meloxicam
- Canine vaccines
- Feline vaccines
- Rabies vaccines



Heating Sources

- ▶ Thermoregulate
- ▶ Incubators
- ▶ Heating pads
- ▶ Heated discs
- ▶ Car converter (plug in source)

Life
Or
Death!



****DO NOT RAISE TOO QUICKLY.****



Blankets & stuffed animals

FUZZ = FUR

COMFY – EMOTIONALLY IMPORTANT



HEARTBEAT STUFFED ANIMALS



**DO NOT use items with looping fabric such as towels.





Defining “Help”

- ▶ Determining what type of help the animal needs:
 - ▶ Reuniting?
 - ▶ Humane Removal?
 - ▶ Truly need a rehabber?
- ▶ Photos are the best!



Reuniting

Give Mom 24 hours

- Depends on body condition.
- Circumstances matter

Must be kept warm!!

- Hand warmers
- Rice/Bean sock
- Heat pad set on low
- Kept out of the sun



Human Conflict

- ▶ Illegal to relocate / kill wildlife
- ▶ Feed pets indoors
- ▶ Don't feed wildlife
- ▶ Humane Eviction
- ▶ Digging in yard
- ▶ Chicken Coops
- ▶ Secure trash cans



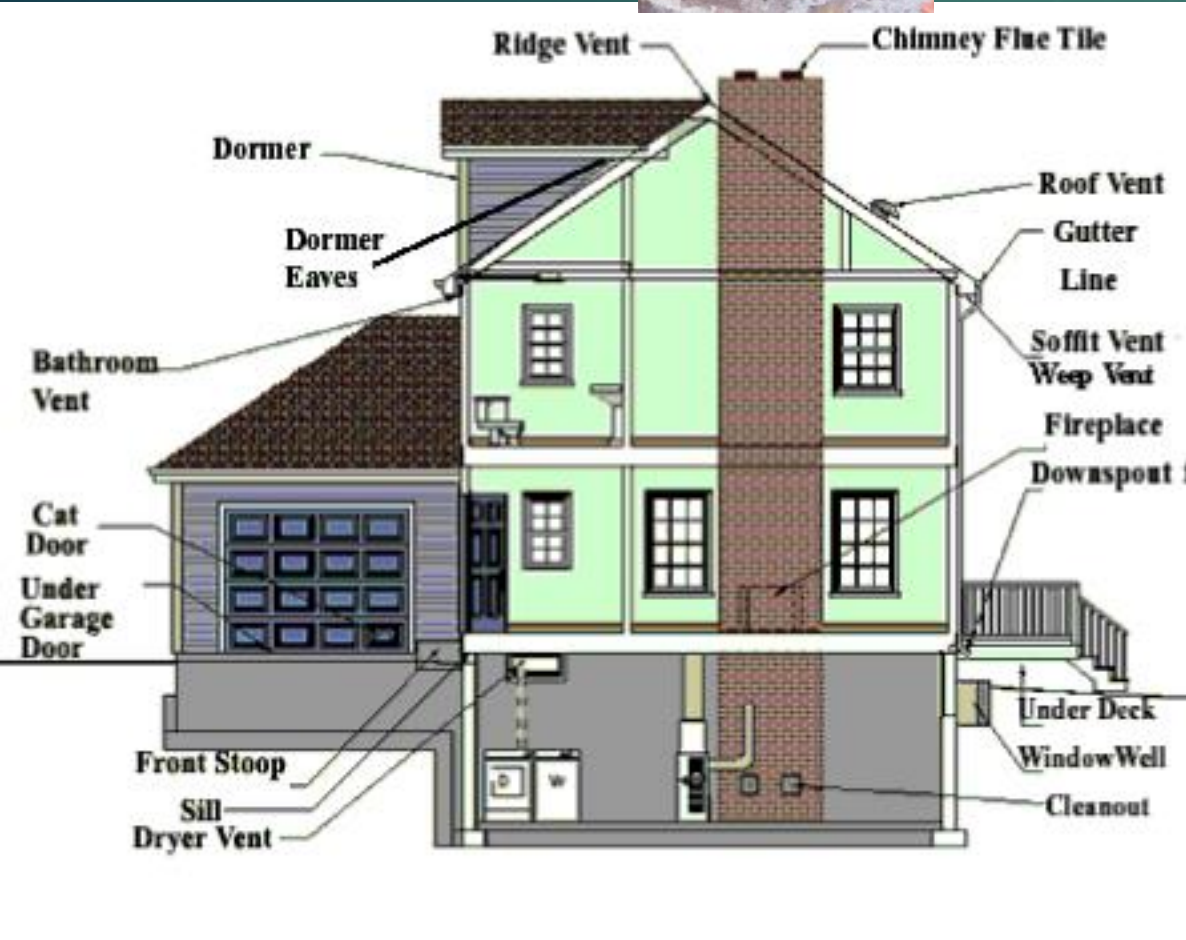
Humane Eviction & Reuniting Baby Raccoons

- Loud noises
 - Bright lights
 - Helium balloons
 - Repel All
 - Vinegar rags
 - DO NOT use moth balls
-
- Give mom time to take all babies
 - Can place babies outside close to entrance
 - Seal opening once all gone
 - Wildlife removal company will only euthanize

Educate the public!



Raccoons in Attic



Prevent entrance
Humanely evict



Intervene NOW – DO NOT attempt reunite

- ▶ Mom is dead
- ▶ Mom has been relocated
- ▶ Wounded / Trauma
- ▶ Flystrike / Maggots
- ▶ Difficulty breathing
- ▶ Predation
- ▶ Emaciation / Dehydration
- ▶ GS fed



Flystrike Treatment Tips

- Avoid washing/wetting the fur - will encourage eggs to hatch faster into maggots.
- Dust with cornstarch to dry the eggs out and prevent them from hatching. Comb out with a flea comb.
- Treat orally with Capstar.
- Treat for shock.



Capstar

Dose: 1mg/kg

Crush ¼ of a 11.4 tablet into powder. Mix powder into 2cc of water and use between a single drop and a few drops orally to treat systemically or use it to flush a wound. It can be safely used in the eyes.

This is a very safe and effective medication when used in small quantities. Can be used once daily and is safe to be repeated multiple days.

An oral dose of Capstar will kill internal and external maggots within 30 minutes.





PROTOCOL

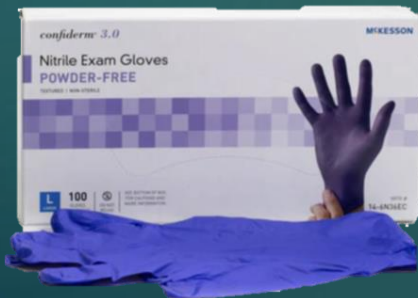
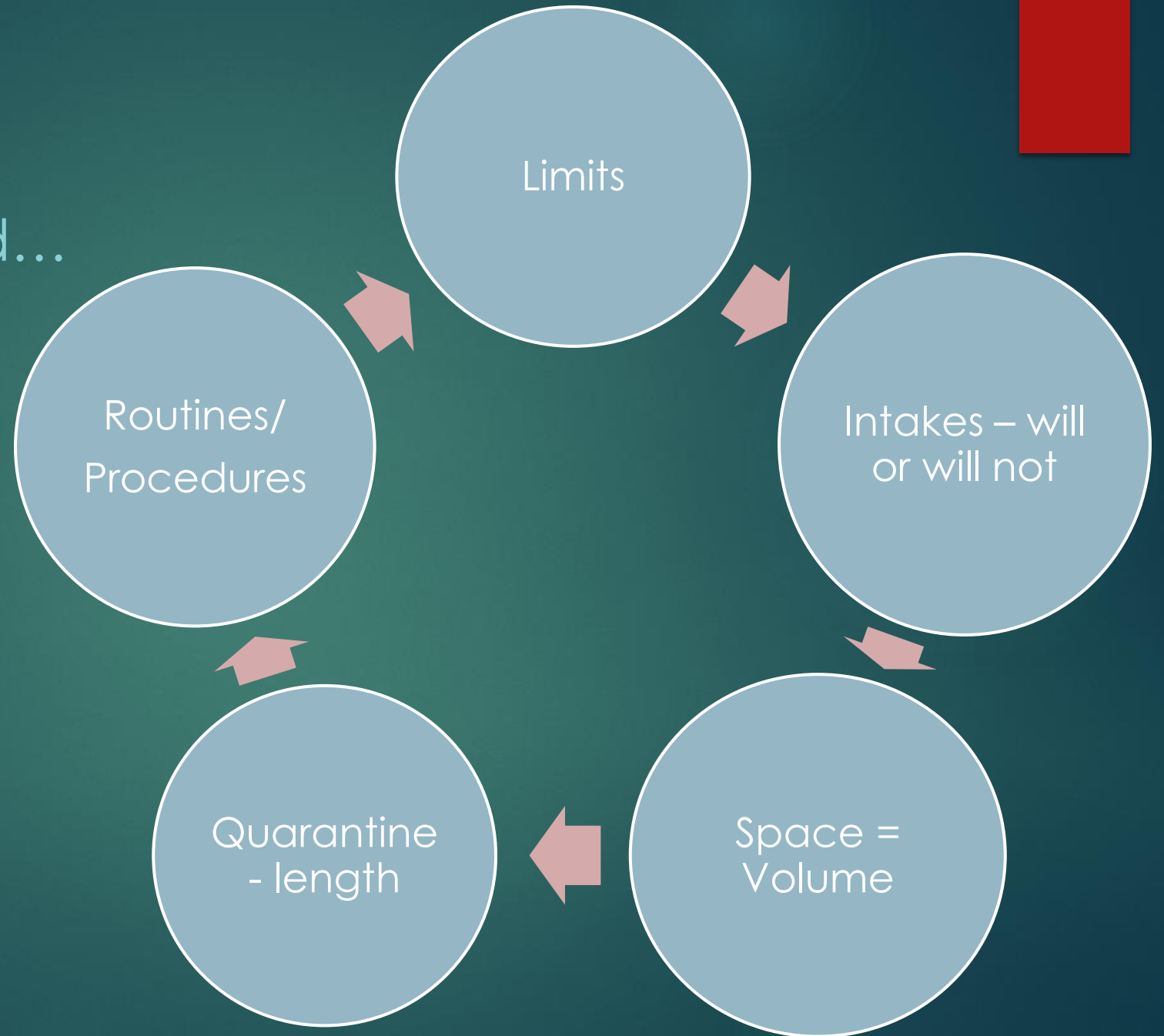


RVS must



Protocols

Safety in mind...





▶ Safety in mind...

- ▶ Create group/litters early after quarantine.
- ▶ DO NOT separate bonded pairs. STRESSFUL
- ▶ Deliberate feeding orders
- ▶ Procedures/Routines
 - ▶ Gloves/Foot bathes
 - ▶ Designate their "stuff"
 - ▶ Clean lowest to highest risk
 - ▶ Vaccination
 - ▶ Deworm





Restricted Rehab



21 DAYS



- ▶ Gold Standard
- ▶ How to separate
- ▶ Routine order of treatment/feed
 - ▶ Healthy to sick
- ▶ Airborne diseases

- ▶ Risk Factors:
 - ▶ Lowest to Highest
 - ▶ Healthy Mom shot/relocated
 - ▶ Mom HBC
 - ▶ Mom observed “off”





Disinfect

- **Safe & NON-TOXIC to animals and humans
- *Removes stress pheromones from environment
 - * Wash dishes, toys, and laundry.
 - * Door handles / refrigerator / microwave / sink handles / washer & dryer



For more on alternative wildlife disinfection protocols see [Wild Mammal Babies: The First 48 Hours and Beyond](#)

Feeding: Formula

► NOTE: This chart is a guideline only and should be adjusted as dictated by developmental clues and the particular animal's response to feeding.

► Overfeeding an animal (both amount and frequency) will result in diarrhea.

► Keep notes. Indications of underfeeding include lack of growth, infrequent bowel movements, and babies acting excessively hungry.

► Observe and adjust accordingly.

Feeding Schedule		
	Age/Weight	Times/Day
Birth	45-90g	6-8/day with a night feed
1 week	100-150g	6-8/day with a night feed
2 weeks	150-200g	6/day, eliminate night feed
3 weeks	200-250g	5/day
4 weeks	250-450g	4/day
5 weeks	500-700g	4/day
6 weeks	750-1200g	3-4/day
7 weeks	900-1700g	3/day
8 weeks	1800-2400g	2/day
10 weeks	2500g	1/day
12 weeks	2700-3000g	weaned



For more feedings and life stages see
Wild Mammal Babies: The First 48 Hours and Beyond



Probiotics

▶ Mix in Formula

- ▶ Neonates
- ▶ On Antibiotics
- ▶ Diarrhea
- ▶ Changing diet
- ▶ Stress

- ▶ VetriScience
- ▶ Benebac Plus
- ▶ Goat Yogurt but low sugar
 - ▶ 5% of total amount of formula (i.e. 2 tsps./cup)
- ▶ FV LA-200
- ▶ Probios



Deworm

- ▶ Oral suspension strength is 50mg/ML
- ▶ Pyrantel Dosing: 0.1ml/1 pound of body weight (0.1ml/lb.)
- ▶ Calculating Pyrantal Dosage
- ▶ 1 gram= 0.0022 lbs/ 1lb= 453.6g
- ▶ (Weight in grams) x (0.0022)= Weight in pounds
- ▶ (Weight in pounds) x (0.1ml/lb.)= Dose of Pyrantel in ml

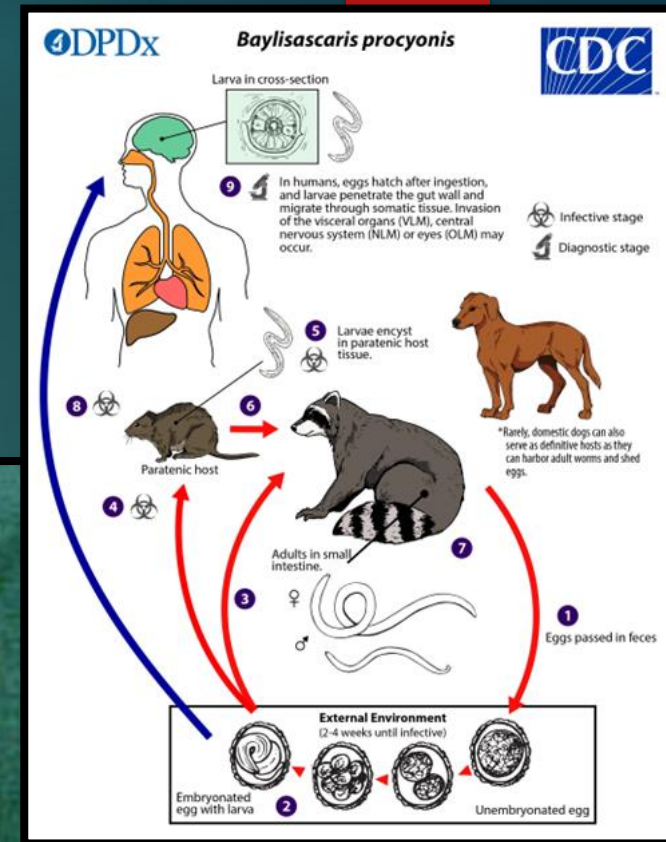
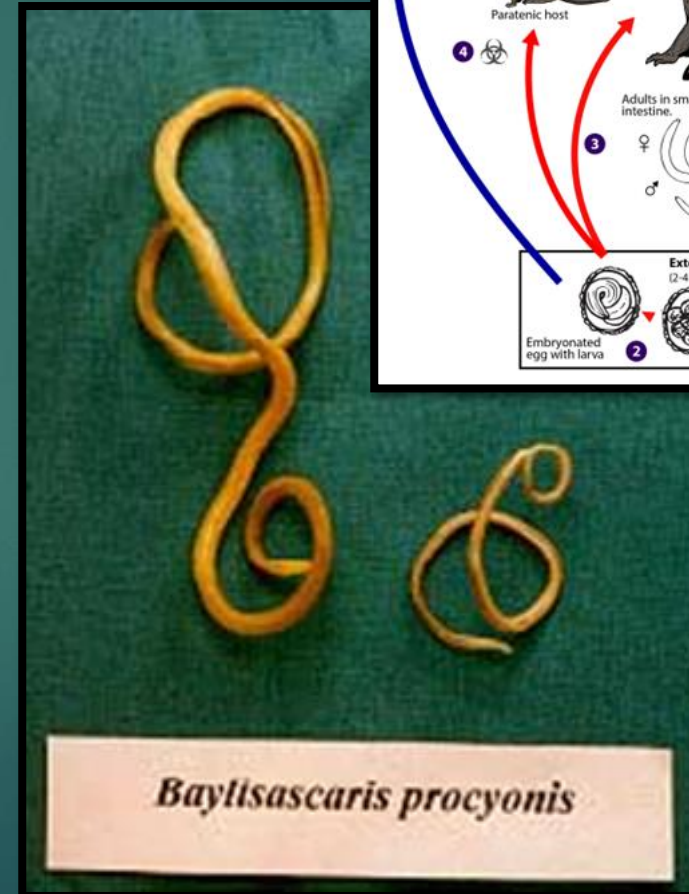


Baylisascaris procyonis

(Raccoon roundworm)

- Raccoon Host – not impacted
- Transmitted via fecal-oral route
- Eggs passed not immediately infectious take 2-4 wks to become infectious
- NOT killed by chemicals, ONLY HEAT - Boiling water or propane flame-gun

***GOOD HYGIENE!!!



Baylisascaris procyonis

Raccoon roundworm

Intake

Once doesn't kill eggs

Every 10 days

Taste good

Easily available

Wide safety margin

Pyrantel Pamoate (50mg/mL) Dosing Chart

Weight in grams	Weight in pounds	ml Pyrantel
150	0.33	0.05
200	0.44	0.05
250	0.55	0.05
300	0.66	0.1
350	0.77	0.1
400	0.88	0.1
450	0.99	0.1
500	1.1	0.1
550	1.21	0.12
600	1.32	0.13
650	1.43	0.14
700	1.54	0.15
750	1.65	0.17
800	1.76	0.18
850	1.87	0.19
900	1.98	0.2
950	2.1	0.21
1000	2.2	0.22
1050	2.31	0.23
1100	2.42	0.24
1150	2.53	0.25
1200	2.64	0.26
1250	2.75	0.28
1300	2.86	0.29
1350	2.97	0.3
1400	3.1	0.31
1450	3.2	0.32
1500	3.3	0.33



Small Cage Set Up

We use various sizes of dog kennels.

Loaded with enrichments.

Litter box

Food/Water Dishes/Lapping Dishes

HOT mess < 5mins!!!

Items graduate with them.



Enrichment

Natural is best!

Ice cubes

Dirt pan

Pine cones

Water tubs with rocks,

Leaves & large branches

Acorns

Live prey item (minnows in tub,
crickets, worms)

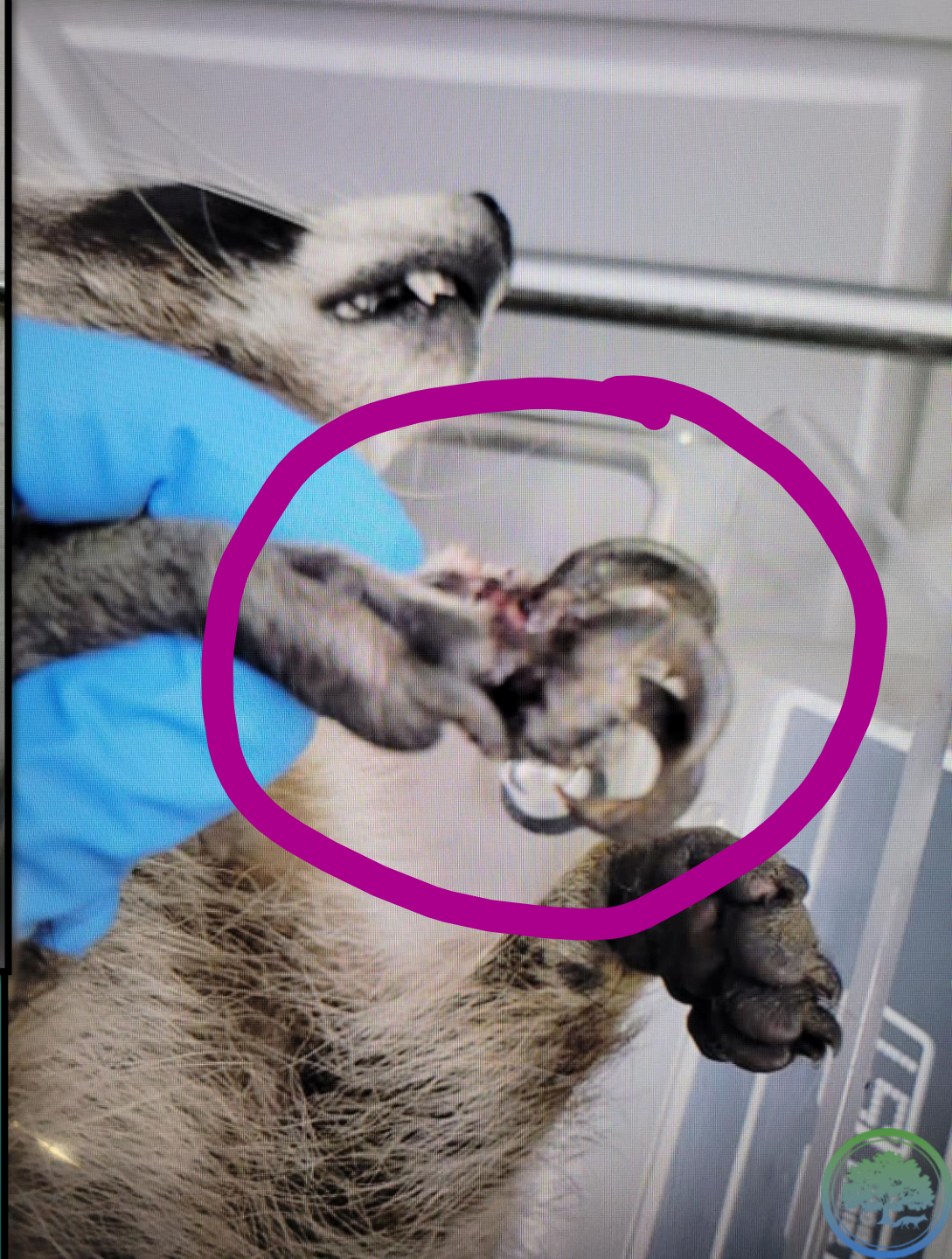




**Raccoons
“wash” their
food to
explore
textures
and learn
about their
surroundings,
not to clean it.**

Highly Sensitive!!!





NOT these cat toys!!



Indoor Enclosures





Cat towers
Hammocks
Trees
Ladders
Exercise wheels

