

Basic Reptile Rehabilitation



06.11.2009

Identification

- Know your local species
 - Visit and work with nature centers
 - Hike/get out in the field



Identification

- Know your local species



Male Three toed box turtle

Identification

Know your local
species



Who is this???



Identification



Blanding's turtle

Identification

- Know your local species
 - Study resources: see resource handout
 - Take part in herptile counts



Identification

- Sexing the patient
 - Turtles-males longer, wider tails and cloacal opening is beyond edge of plastron
 - ✓ Aquatics- males also have longer front nails
 - ✓ Box turtles- males also have a concave plastron and brighter red irises



Female+ male three-toed box turtles



Male and female three-toed boxes

Identification

- Sexing the patient
 - Snakes- probe vent w/ snake sexing probe or tom cat catheter
 - Only for experienced handlers
 - Females measure 3-4 ventral abdomen scales and males measuring 5- and up



Identification

- Sexing the patient

- Lizards-males have enlarged femoral pores and are often larger and brighter



09.24.2010

Femoral pores



11.05.2007

Crevice spiny

Identification

- Sexing the patient
 - May need to provide a nesting box
 - May need to salvage eggs from a euthanized female

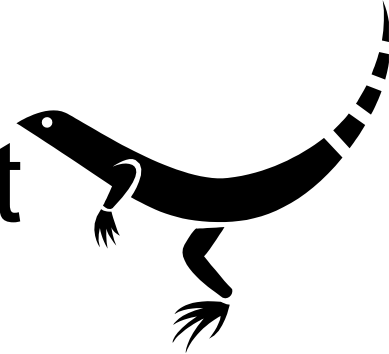


Identification

- Be ready for common seasonal species
- Know and discuss endangered and threatened species cases with DNR
- Meet your DNR herptile specialist
- Venomous herptiles



Handling and transport



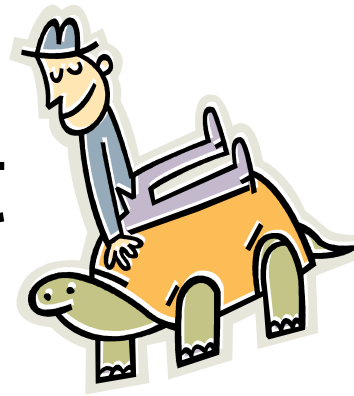
Cover heads and carriers whenever possible to minimize stress

Lizards

- Transport in a critter carrier or Rubbermaid type container
- Handling: grasp behind neck and support rest of body



Handling and transport



- Turtles

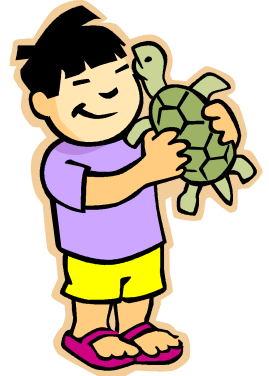
- Transport in buckets or Rubbermaid type container
- Use shields or plunger for snappers
- Place on cup or other appropriate container to place turtle on



Florida box turtle-
male

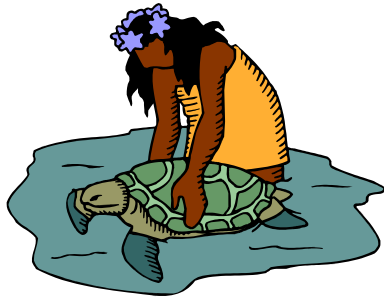


Handling and transport



- Turtles

- Handle on either side of carapace (snappers, use extreme caution!)



Handling and transport

Snakes

- Transport:

- in pillow case or Rubbermaid type container

- Handling:

- large or aggressive snakes use gloves or towel, if needed grasp behind head and support the body
- Small or non-aggressive snakes support whole body and let move freely



Handling and transport

- Snakes-handling



Juvenile fox snake



Ball python

Exam and record keeping

- Use a check in/record sheet and be accurate: see check in sheet handout
- Use a systematic exam technique that is the same each time
- Get weights on everyone



Basic Amphibian Care

- Use non-bleached white paper towels for substrate
- Keep at 65-72 degrees and 75-95% humidity until researched species
- Use water aged at least 24 hours with no top in container
- Provide hide box



Husbandry

- Housing:

Pools, cement mixing tubs, water troughs, tanks and home made enclosures



Turtle tub

Snake enclosure



01.04.2010

Husbandry

- Housing

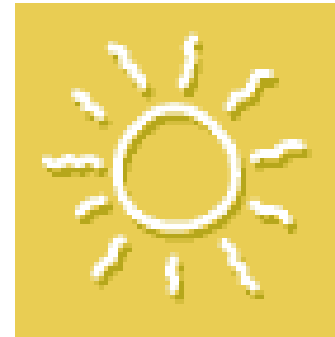
Water troth



Amphibian enclosure



Husbandry



Lighting

- Natural, full spectrum bulbs (UVB+UVA) like Zoo-med brand
 - Have no more than 12 inch away from patient and change bulb after 1 year of use
 - Use a timer to have lights go off in 12-14 hours



Husbandry

- Heating
 - Submersible heaters, heat lamps, ceramic heat emitters and under tank heaters



Desert lizard enclosure

Husbandry

Nutrition

- Live, frozen, fruits and veggies, commercial foods and supplements
- Enrichment
 - Stimulation, reduces stress and increase wellbeing



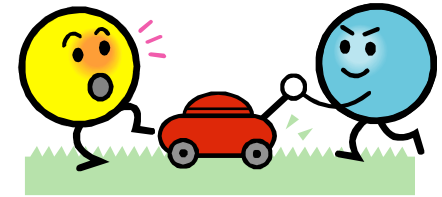
Husbandry

- Cleaning
 - Use chlorhexidine diluted 8oz/gal, only use for 1 week after mixing
 - Use diluted bleach 1/2 tbsp/gal with cool water and let dry, for supplies in between patients



Common reasons for herptile rehabilitation

- Hit by car injuries
- Lawn mowers and weedwackers
- Dog and cat attacks
- Displaced: need short relocation or overwintering
- Fish hooks
- Human abuse: the public needs to be educated



Common reasons for herptile rehabilitation

- Take time to educate!!!



Lydia releasing a garter snake

You need to find and work with a reptile veterinarian

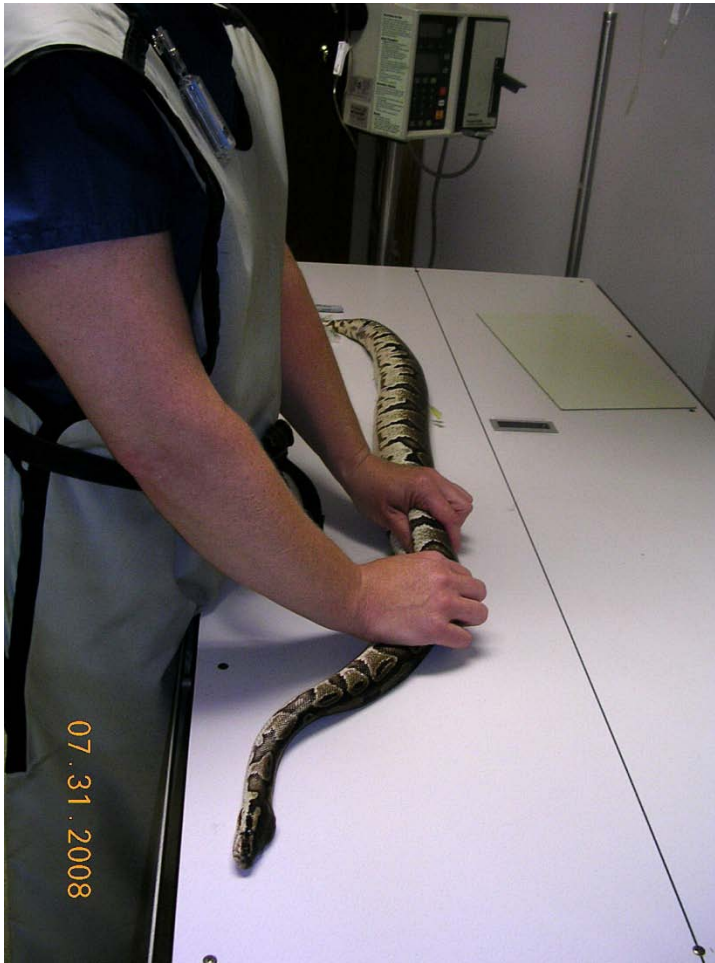


- Why is this so important?
 - To get prescription medications with the correct doses
 - Humane euthanasia
 - Surgery
 - Radiographs: gravid? fractures?
 - Share knowledge and resources
 - See: Association of Reptile and Amphibian Veterinarians @ www.arav.com



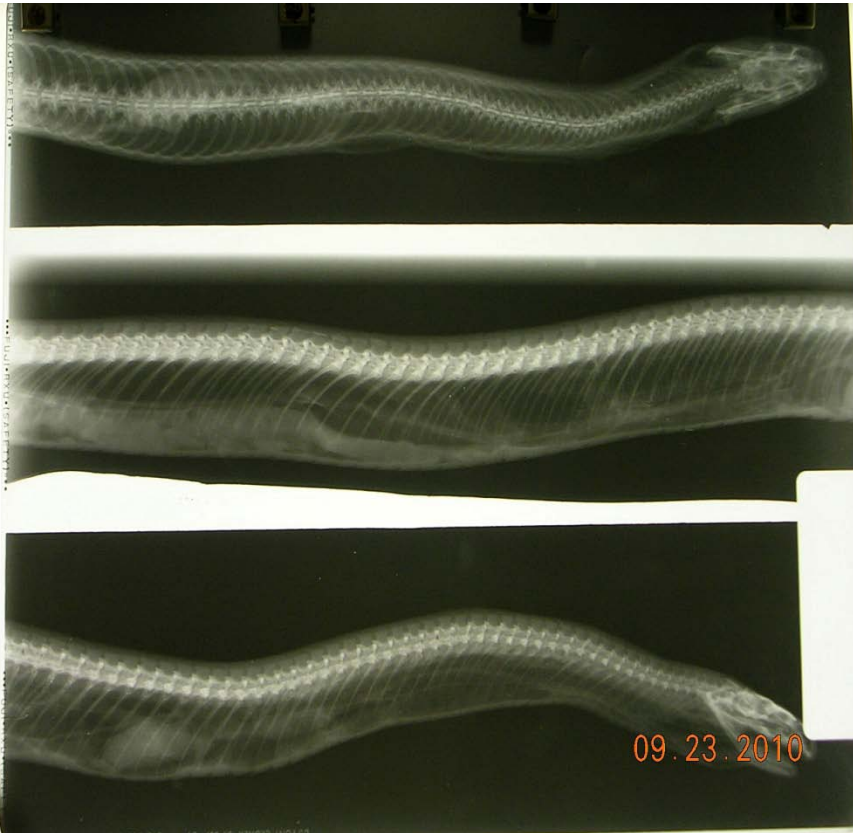
Why you need a reptile vet

- Radiographs

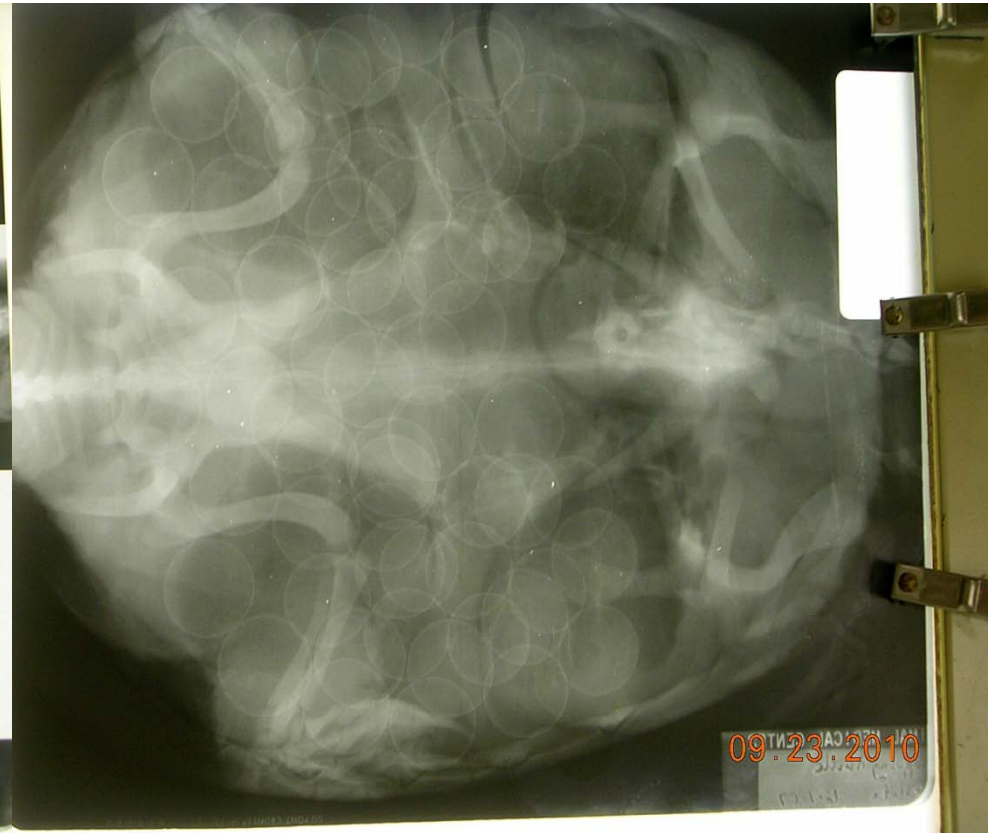


Why you need a reptile vet

- Radiographs



Fox snake



Gravid snapping turtle

Why you need a reptile vet

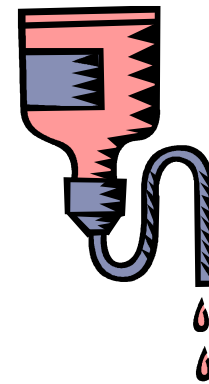
- Surgery



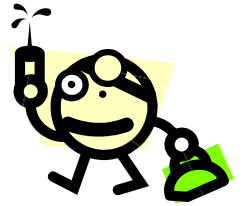


Common Treatments

- Fluids: Use Normasal or Plasma-lyte
 - Give 10ml/kg/day fluids warmed to 85 degrees
 - Give I.C. or S.Q.
 - Clean skin with dilute chlorhexidine, swab w/ alcohol and wipe dry



Common treatments



- Injections

- Antibiotics: Commonly used, Amikacin 50mg/ml give I.M. 1st dose give 5mg/kg then ½ dose every 72 hours for 5 treatments
- Pain meds: Commonly used, Meloxicam S.Q. 0.5-1mg/kg every other day for reptiles. For amphibians give 0.1-0.2mg/kg P.O. once daily.
- Vital E-A&D: 0.15ml/ kg give I.M. repeat in 3weeks

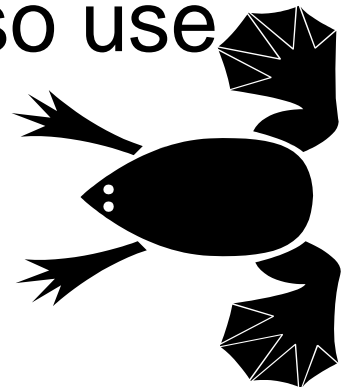
Common treatments

- Soaks
 - Diluted betadine and medication soaks are often used for herptiles with wounds and fungal infections



Amphibian abrasion protocol

- Diluted betadine soaks for 10 minutes once daily, then rinse
- Gentamicin oph. Drops 1 drop to abrasion twice daily
- Metacam P.O. once daily
- Silver sulfadiazine cream 1% apply to abrasion once to twice daily, can also use on shell fractures



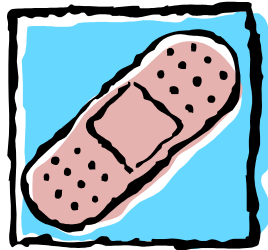
Common treatments

- Shell fracture stabilization
 - Use white medical tape across fracture site to pull in
 - Use super glue on ends of tape only
 - Apply Tregaderm



Common treatments

- Shell fracture repair
 - No longer use fiberglass patches
 - Use super glue to position tie mounts in place
 - Cover with Devcon 2-ton epoxy.
 - Pull together with zip ties



Common treatments

- Shell fracture repair
 - See failed technique



Common treatments

- Flushing wounds
 - Warm flush to 85 degrees
 - Use sodium chloride fluids
 - Use eye protection, gloves and mask
 - Use 60ml syringe with a 18 gauge needle
 - Apply sterile lobe to open tissue to keep moist



Common treatments

- Wound flushing



Common treatments

- Wound flushing



Box turtle with maggots

Common treatments

- Post mortem egg removal and salvaging
 - Saw open shell on turtles at bridges if needed
 - Use scalpel to cut all around plastron for removal



Common treatments

- Post mortem egg salvaging



Push eggs from oviduct after opening

Common treatments

- Post mortem egg salvaging
 - Set up incubator
 - Place eggs in moist vermiculite at 82-85 degrees



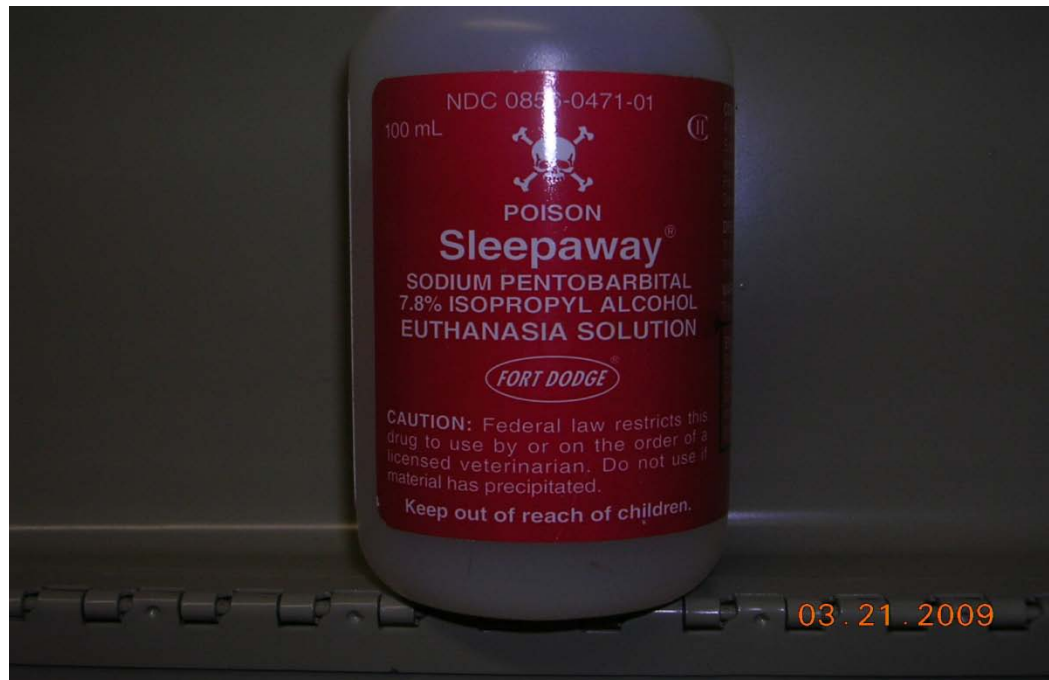
Common treatments

- Baby painted turtles- 60 days incubation



Euthanasia

- See acceptable methods in the Minimum Standards for Wildlife Rehabilitation
 - Use Sodium Pentobarbital (sleepaway)



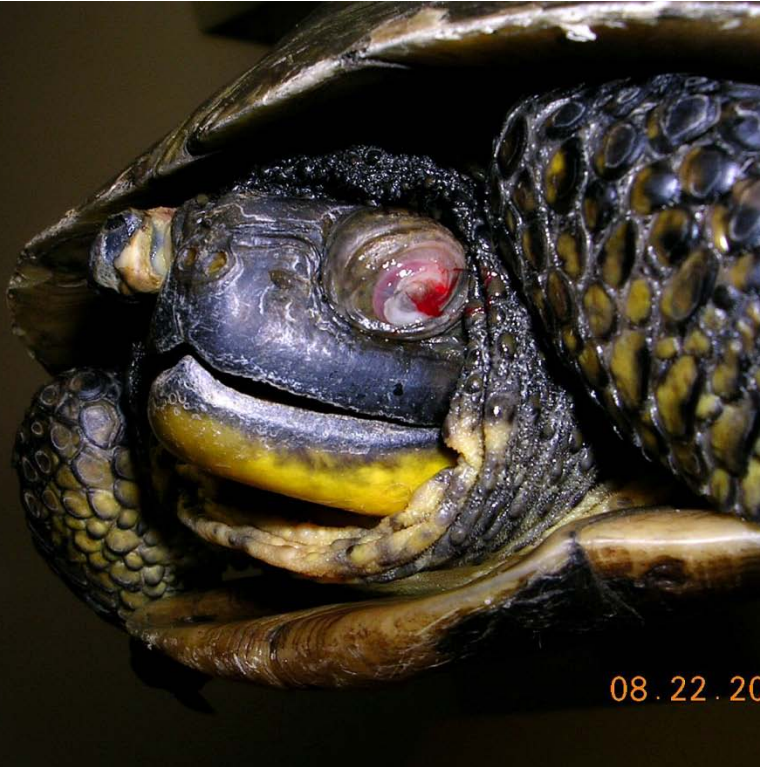
Euthanasia

- Reptiles: 0.8ml/1# I.C. or I.V.
- Amphibians: >100mg/kg P.O. or I.V.
 - Snakes and lizards- 2or more inches above vent
 - Turtles into coelom from hind leg opening



Euthanasia

- Don't make the decision alone



08.22.20

Blind blanding's turtle



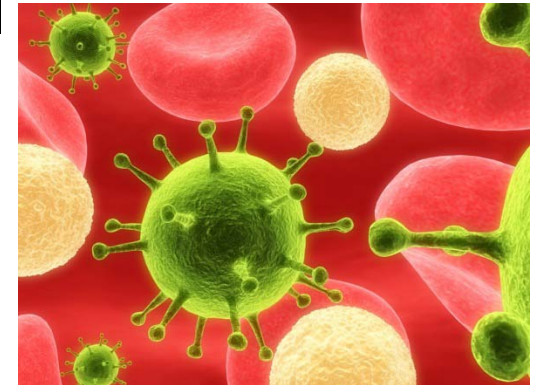
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Intracoelomic injection for turtles

Release



- Release criteria
 - Must be able to see and self feed
 - To prevent disease transmission- Must have been kept isolated from other reptiles
 - Genetic factors-they have evolved in response to local environmental factors, introducing could be detrimental



Release

- No later than 6 weeks prior to normal hibernation period
- At closest proximity to original site
- Not releasable if in rehabilitation longer than 1 year
- Use Google maps to find closest water



Questions?

- Questions or problems about herptile husbandry or veterinary care? Feel free to call Terri 920-915-1084.
Email: tcassens@new.rr.com



The end