



Lizards

Bearded dragons (*Pogona*)





Bearded dragons

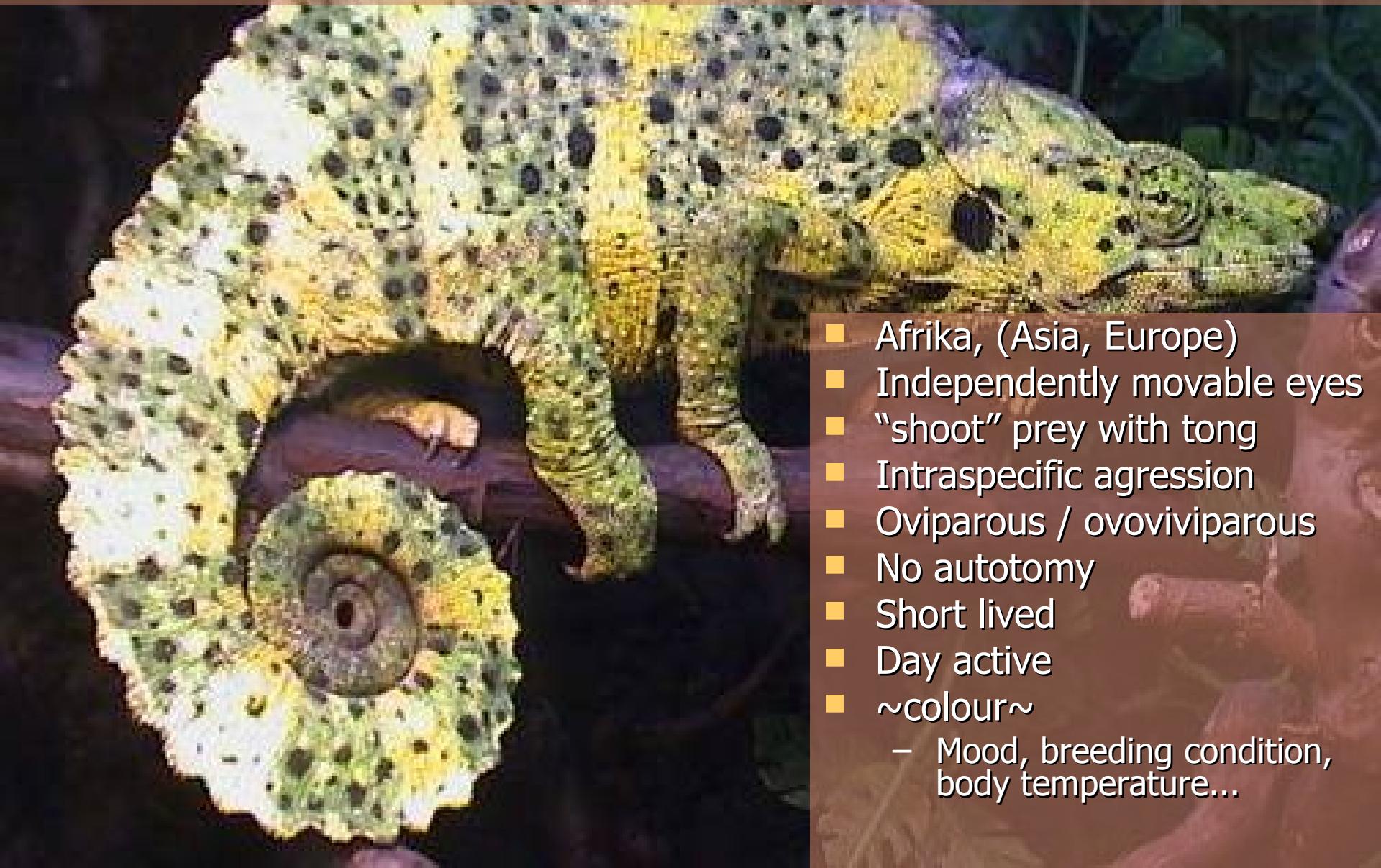
- Australia
- Desert terrarium
- Min. 0,75 m² per pair
- Territorial
- Diet
 - Juvenile: mainly insects
 - Adult: 50% vegetables / 50% insects
- Hibernation
- 10 – 30 eggs up to 5 x per year!

Water dragons (*Physignathus*)



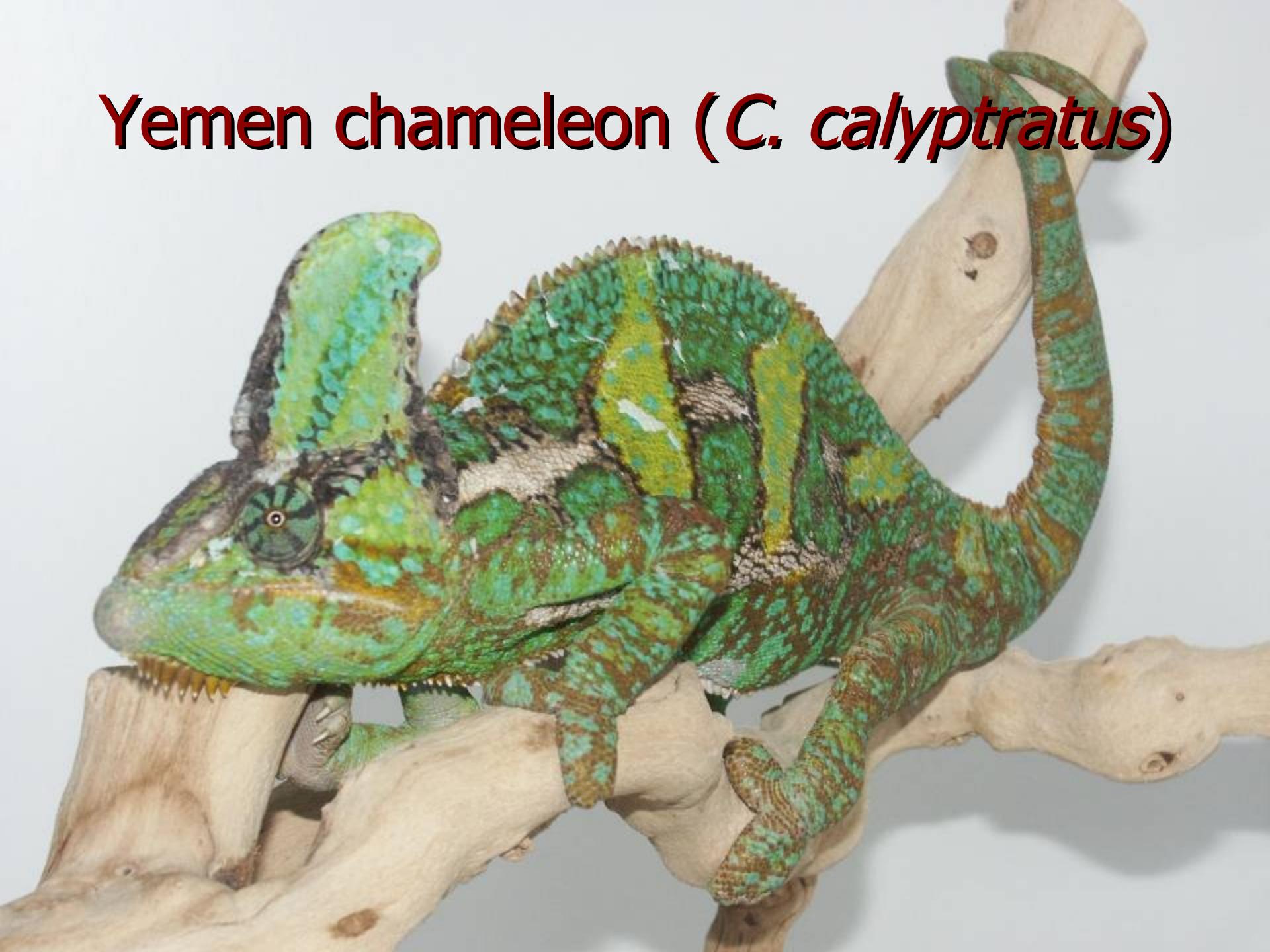
- South East Asia
- Rain forest
- Insects (fruit, vegetables)
- Territorial
- No hibernation
- 5-15 eggs (1-3 x per year)

Chameleons / Chamaeleonidae



- Afrika, (Asia, Europe)
- Independently movable eyes
- "shoot" prey with tong
- Intraspecific agression
- Oviparous / ovoviviparous
- No autotomy
- Short lived
- Day active
- ~colour~
 - Mood, breeding condition, body temperature...

Yemen chameleon (*C. calyptratus*)



Chameleons in captivity

- Short lived
- Insect eaters
- Drinking water!!
- Mountain inhabitants: strong nightly temperature drop!! (vb *C. jacksonii*, *C. hoehnelli*)

Geckoes



- Old + New World
- Small - medium
- Adhesive paths (ex eg *Eublepharius*)
- Oviparous
- Night active (ex eg *Phelsuma*)
- Autotomy, fragile skin
- Genera
 - *Eublepharius* (leopard geckoes)
 - *Phelsuma* (day geckoes)

- Middle East
- No climbers, desert
- Night active
- Insect eaters
- Territorial
- 2 eggs to 3x per year
- hibernation

Luipaardgekko





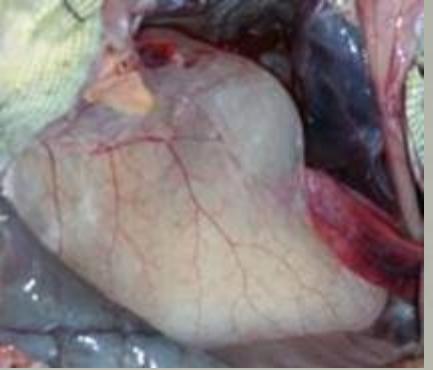
Green iguana (*Iguana iguana*)





Anatomy





Terrarium

- $2 \times 1,5 \times 2 \text{ m}^3$
- Climbing!
- Egg deposition site!!
- water
- group?



Heating and lighting

■ heating

- day: 20 – 45°C
- night: 20 – 25°C
- sunbathing
- NO hibernation



■ light

- BRIGHT
- UV



Outside?

- summer
- Sun
- Shade!
- risks
 - escape
 - cooling
 - overheating

Hospitalisation



Feeding vegetarian lizards (eg *Iguana*)

- LEAVES, flowers, fruit!
- Animal protein?
- Commercial pellets?
- Energy requirements
 - 6% rodent
 - 3% bird
- coprophagy



Insect eating lizards

- variation!
- Chitine
 - Ca/P
- Nutritional value ~ gut content
 - Vitamin A, D
 - “gut loading”



Nutritional disorders

Specialist feeders

- *Phrynosoma*,
Phrynocephalus!
- Ca / P too low
- Too much protein
- Too fat



alles voor
GERMANY
school - bureau - takenen
papierhand
kerkstraat 49 -
voor info:

Captive breeding

- ~ season
 - Temperate climates
 - Tropics
- Eg Iguana terrarium:
december – may
- agression
- gestation: 8 – 12 weeks
- Iguana follicles: +/- 20 mm
- 1/3 female weight
- 10 -70 eggs





Incubation (*Iguana*) cf Köhler

- Fertilized?
 - Dorsal pink spot
 - +/- 15 g, 4 cm
- 28 – 30°C
- vermiculite
- -200 - -500 kPa
- 70 – 90 days
- 10 g – 6 cm



manipulation

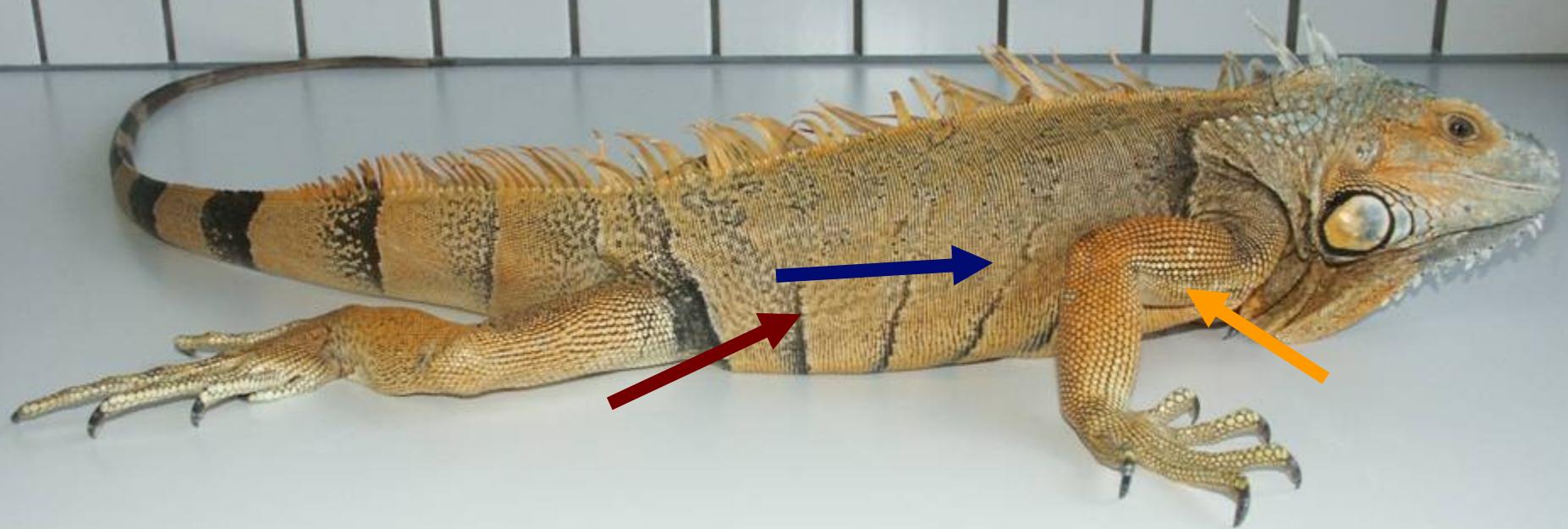


Tail / skin!





injections



IV access



Clinical examination

- Cf chelonians +
 - Mandibular rigidity, tremor, skin
 - endoscopy



Haematology / biochemistry

- cytology
- biochemistry
 - AST, bile acids
 - Uric acid
 - Ca, P, Na, K
 - TP

Most prevalent diseases

Ectoparasites



Dermatitis



Devriesea agamarum



Bacteria...

- G-, mostly SECONDARY
- abscesses, septicaemia, other (lung, kidney, (intestine?))
- *Aeromonas, Pseudomonas, Pasteurella, Citrobacter, Salmonella, Mycobacterium*
- Importance?
 - Pure culture from a lesion!!
 - antibiogram

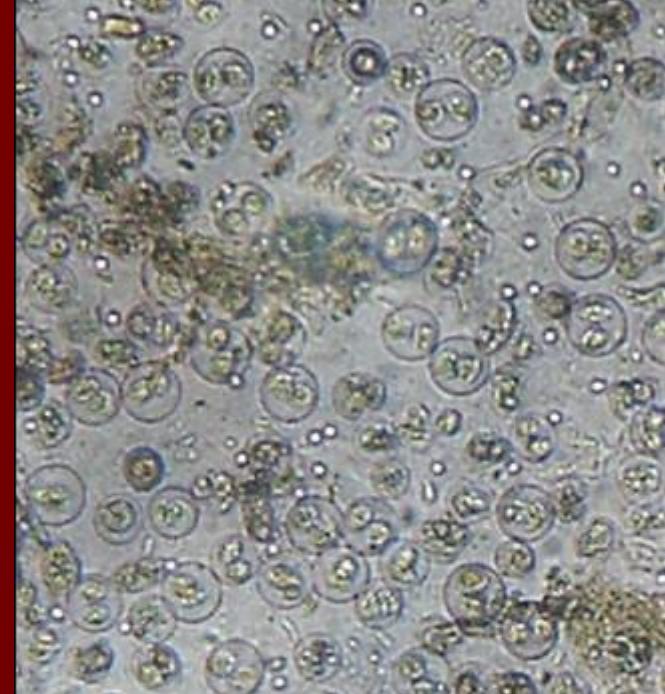
Abscesses / granulomata

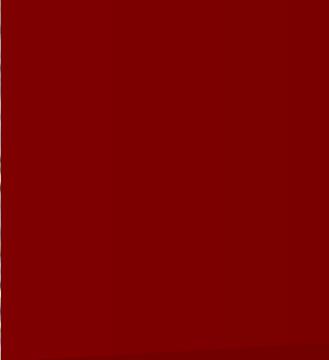
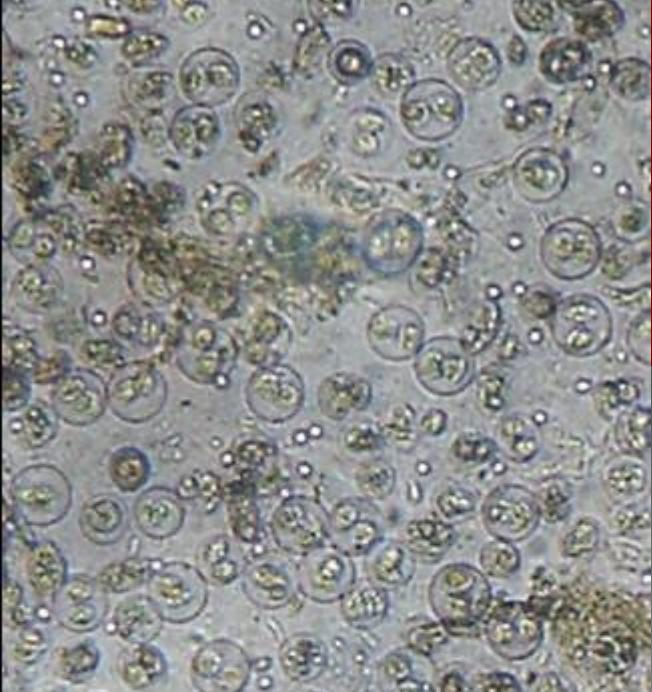
- Cause?
- Mostly local:
extremities, head
- Sometimes:
generalisation, sepsis
- Therapy:
 - open
 - lokal antibiotic
ointment



Parasitic diarrhoea

- Nematods
 - fenbendazole
- (trematods / cestods)
- Flagellates!!
 - secondary (stress etc)
 - Metronidazole
- Coccidiosis
 - Pogona, chameleons!!
 - Cryptosporidiosis in *Eublepharius*!
- amoebiasis







Gout

- Joints, visceral
- herbivores ~ dietary protein
- dehydration
- allopurinol?



Metabolic bone disease

- THE most PREVALENT disorder in lizards
- Vit D3 / Ca
- “rubber jaw”, osteodystrophia fibrosa, hypocalcaemia
- Therapy:
 - Ca gluconate IP
 - Vit D3 / Ca PO



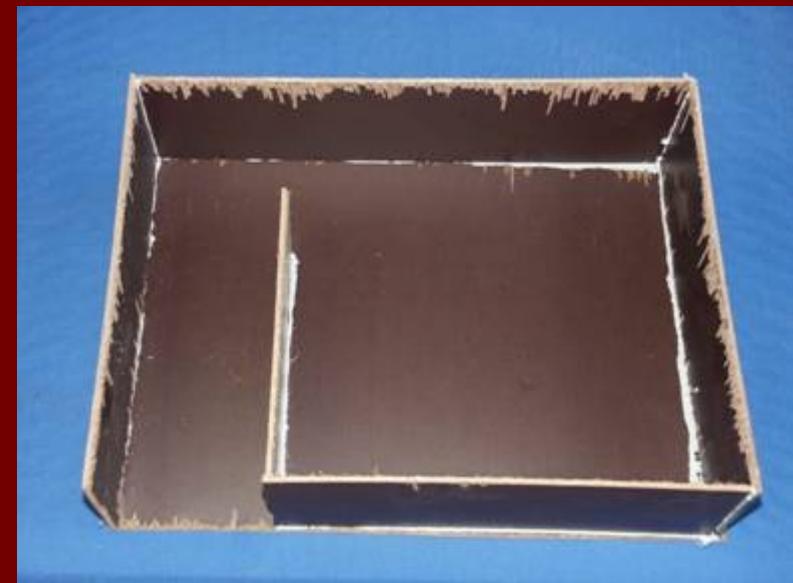




Hypocalcaemia *P. concincinus*

Dystocia / egg binding

- Egg deposition site, stress, salpingitis, MBD!, deformed eggs, debilitation
- Palpation / RX
- Therapy:
 - Egg deposition site
 - Ca gluconate IP
 - oxytocine
 - surgery



Dystocia

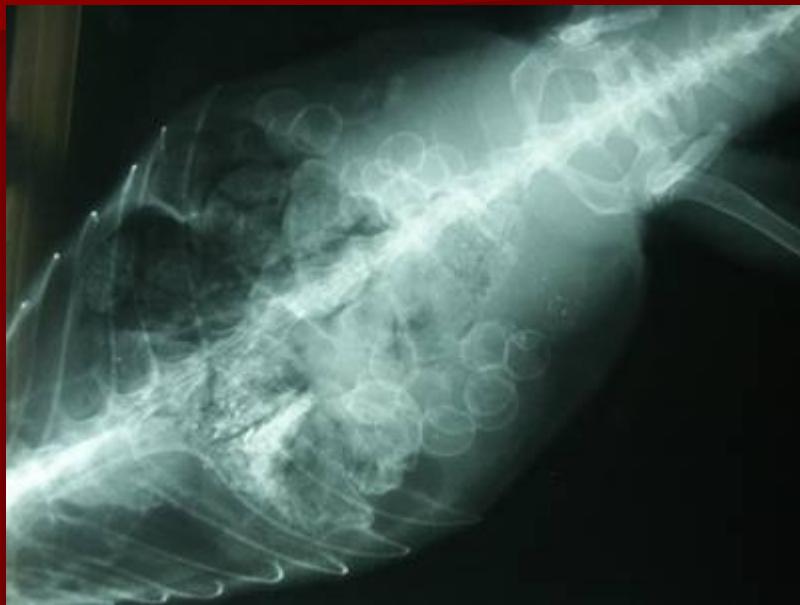






Cesarian section *I. iguana*

Follicular stasis!



Burns

- Superficial - deep
- Therapy:
 - fluid
 - flammazine
 - antibiotics
 - euthanasia

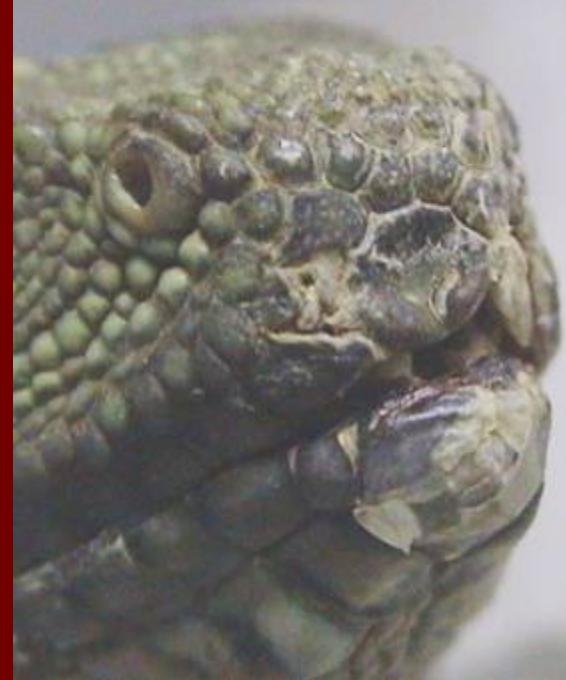


Burns

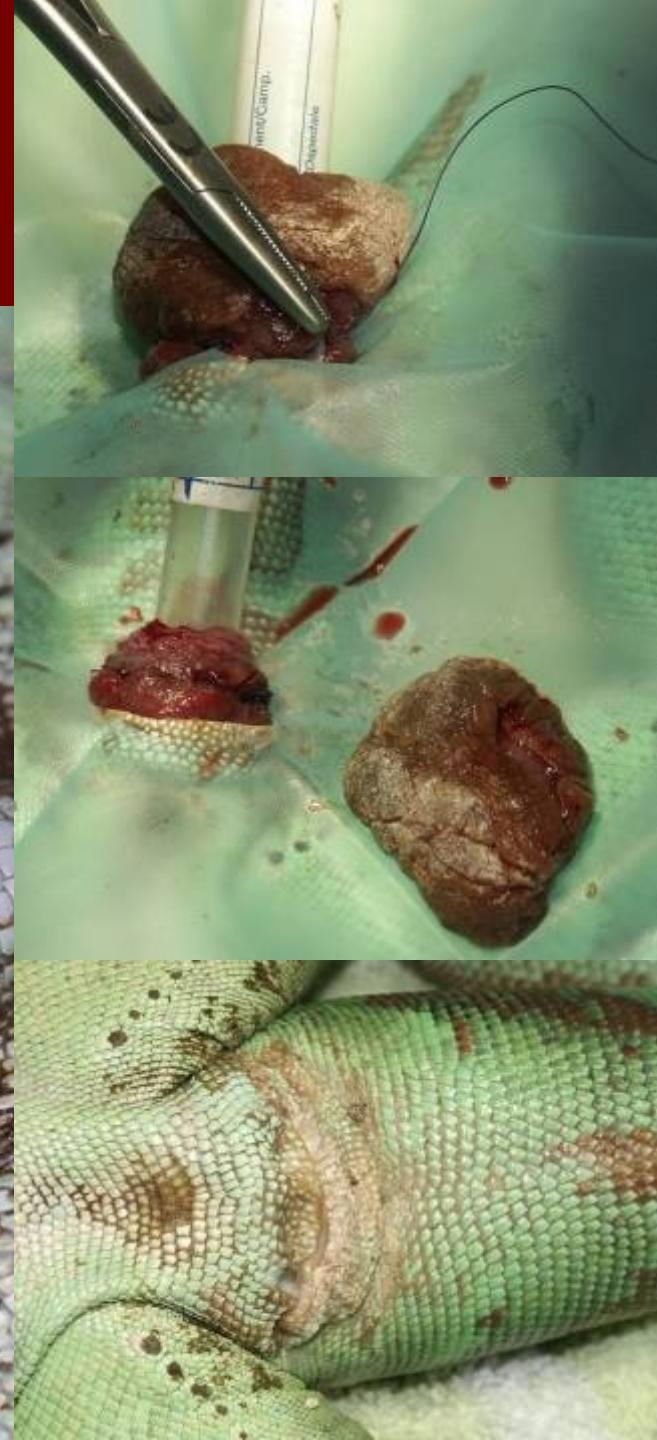


Traumata

- Accidents, fights
- Snout



Cloaca prolaps



Disecdysis



Adenovirosis



- Young bearded dragons!

Hypovitaminosis A



Insect eating lizards!

Papillomatosis

- Green lizards (*L. viridis* complex)
- Silver nitrate, surgical, cryo



Social stress



Sex determination

- Sexual dimorphism : pores, colour pattern, hemipenes
- “Popping”
- (probing, echo, RX)
- endoscopy





endoscopy

