

3.6. Anaesthesia

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For captured lynx we use the following combination of anaesthetics:

Medetomidine, ketamine, butorphanol, also possible midazolam in populations with an increased risk for cardiovascular complications.

1. HEALTHY POPULATION	2. POPULATIONS WITH INCREASED RISK FOR CARDIOVASCULAR COMPLICATIONS
Butorphanol 0,05 mg/kg	Butorphanol 0,05 mg/kg
Medetomidine 0,04 - 0,06 mg/kg	Medetomidine 0,04 mg/kg
Ketamine 3 - 5 mg/kg	Ketamine 3 mg/kg, Midazolam 0,2 mg/kg
Antagonisation: Atipamezole 0,2 mg/kg	Antagonisation: Atipamezole 0,2 mg/kg Flumazenil 0,03 mg/kg

To prolong anesthesia we use application of 1% ketamine (1 mg/kg) i.v, propofol 3 mg/kg i.v., isofluran.

For antagonisation we use atipamezole 0,2 mg/kg (atipamezole:medetomidin ratio = 5:1), flumazenil 0,03 mg/kg (if midazolam was used), eventually naltrexone for opioid antagonisation 0,1 mg/kg.

Fluid therapy during anaesthesia:

Ringer solution up to 50 ml/kg s.c., bolus of 5 ml/kg i.v. can be given.

OXYGEN AND I.V. ACCESS ARE OBLIGATORY!

Oxygenation: Tube (size 6-9) Mask Nasal cannula

3.6.1. Drug applicationWounds: Amoxicillin (i.m.) Cefovecin (s.c.) Oxytetracycline (i.m.)Parasites: Simparica (sarolaner) Broadline (fipronil/S-metopren/Eprinomektin/Prazikvantel)
 Profender (Emodepsid/Prazikvantel) Bravecto (Fluralaner) -application on the skinPain/inflammation: Meloxicam (s.c.)Fluid therapy: Ringer infusion amount: _____**3.6.2. Diagnostic testing**Detailed instructions about blood, urine and fecal analysis are provided in 3.7. *Clinical examination protocol*. Also, a list of suggested pathogens and testing methodology are provided in 3.7. *Clinical examination protocol*.

List of collected samples:

- blood serum urine feces eye swab ear swab mouth swab anal swab
 genital swab hair external parasites (_____) _____
 _____ _____

3.6.3. Clinical examinationDetailed description of the procedures can be found in 3.7. *Clinical examination protocol*.**GENERAL INFORMATION**

Animal ID:	Gender: <input type="checkbox"/> M <input type="checkbox"/> F	Bodyweight:	Coordinates:	Date:
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DESCRIPTION

Mouth	Color:	Teeth:	Lesions:
Nostrils	Color:	Discharge:	Lesions:
Eyes	Swelling:	Palpebral reflex:	Lesions:

Ears	Parasites:	Discharge:	Lesions:
Abdomen	Size:	Palpation:	Lesions:
Paws	Cold/warm:	Lesions:	
Other:			

EXAMINATION

Cardiovascular	CRT: Auscultation:	Peripheral pulse:	Vein filling:
Respiratory	Auscultation:		
Lymphatic nodes	Normal/abnormal:	If abnormal, which:	
Musculoskeletal			
Urogenital			
Hydration status	1 <input type="checkbox"/> Normal 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> dehydrated		
Pregnancy or lactation:			

Anaesthesia protocol

Date: _____ Location: _____

Recorded by: _____

Weather: _____ Temperature/Humidity: _____ °C / _____ %

Species: _____ **Sex:** _____ **Age:** _____**Weight:** estimate _____ weighted _____**Name / ID:** _____ **Microchip-No.:** _____**Nutritional status:** very good good moderate bad cachectic**Health status:** good sick injured unclear**Reason for capture:** Marking/sampling Health check Treatment Transport**Status before capture:** free-ranging zoo/enclosure quarantine**Capture method:** dart gun box trap foot-snare _____**Behavior before induction:**
_____**Procedure of anaesthesia and manipulations.**

Time (hh:mm)	Time (t)	
		Enters trap
		Induction/first shot
		Anaesthetic depth reached
		Hands on
		Start veterinary examination/manipulations
		Collecting blood
		End of manipulations
		Administration of antagonist(s)
		First spontaneous movements
		Moves away (more details of recovery phase under comments)

Course of immobilisation: problem free problematic: temperature cardiovascular respiration other: _____

Respiratory rate (RF) and **heart rate (HR)** are given in breaths and heartbeats per minute respectively. The pulse can be felt e.g. on the femoral vein. Check whether the frequency matches that of the heart (if not=pulse deficit), whether it is strong, throbbing, or flat. (normal: strong, no deficit) The **colour of the mucosa** is assessed in the mouth: white/pale/pale pink/reddish/bluish/greyish/yellowish/etc. (normal: pale pink) **The capillary refilling time (CRT)** is measured by pressing with a finger on the mucosa of the mouth until there is a bright spot; then count how many seconds pass until the colour returns to normal. (normal: <2 seconds) Body temperature (T°) is expressed in degrees Celsius and measured with the thermometer in the anus, reference interval: about 37.8.0-39.0°C Palpebral reflex: When touching the eyelid with a finger, an animal reacts by blinking (depending on the strength: +/+/+++). In a state of anaesthesia, the reflex cannot be triggered (-). Ear reflex: if you touch the animal in the ear, it moves the auricle (+/-).Foot reflex: if you pinch the skin between the toes tightly, the animal pulls the leg back (+/-). (not present in the anaesthetised state). Injection route = intramuscular (IM), subcutaneous (SC), intravenous (IV), oral (O) Injection method = hand (H), blowpipe (B), gun (G); MICS (M).

Further information/comments, complications: