Ice associated seal rehabilitation in Marine Mammal rehabilitation centre of the Leningrad region, St Petersburg, Russia
Where we work
Ice breeding seal species in rehab:

- Baltic grey seal
Ice breeding seal species in rehab:

- Baltic ringed seal
Ice breeding seal species in rehab:
• Ladoga ringed seal
Specifics

- Highly dispersed population during pupping season (March-April), no female aggregation, no interactions with other pups or adults until weaning
- Pup development in snow lairs (ringed seal) or on ice surface (grey seal)
- Long lactation period for ringed seal (6 week, from 3-4 to 16-22 kg) and medium for grey seals (2 weeks, from 6-7 to 35-45 kg)
- Pups tend to stay out of water at least before molting (2-4 weeks for ringed seal, 7-10 days for grey seals)
Main causes for mother-pup separation:

1. Early ice break out and melting on Ladoga Lake and the Gulf of Finland

2. Storms

3. Human caused disturbance (including ice fisheries, tourists, icebreaking on the Gulf etc..)
Specifics

• Pups might be stranded on shore or found on ice floes without mother in attendance

• Frequently pups are found within the city boundaries in the Neva River -> identification might be required

• Pups in the city often stranded with severe traumas, extreme starvation and dehydration levels, parasitical invasions etc. -> intense treatment is required
Challenges:

Grey seals

- Short lactation period, high weaning weight (difficult to achieve quickly in rehab)
- Fast learners - fish feeding by human should be done with extra care
- Require interactions with other animals/human – precaution measures are important to avoid attachment to human and develop normal protective behaviour
Challenges:

Ringed seals
- Extra sensitive to any kind of external influence or changes in the environment resulting in low growth rates, aggression to other individuals or humans
- Need to be kept separately from other species/individuals
- Very “picky” in term of diet
- Need to be released in close proximity to summer haul out sites
Challenges:

General
• Multi milk is not available in sufficient amount (high price, transportation time and cost) -> force feeding with fish porridge and then with whole fish.
• Feeding with whole fish is performed in such a way to ensure that the animal does not associate fish appearing in the pool with human presence.
Key principles

• As little time in the rehab as possible (treatment-weight gain-ensuring no attachment to human – release)
• As little interaction with public as possible and minimum interaction with human at the latest stages of rehab process
• Monitoring of weight, health condition and behavior throughout of rehab process
• In most cases – no permanent access to water, but regular (a few times per day) opportunities for swimming with constant monitoring of seal’s condition (underweight pups tend to get cold being left in the water)
Science & rehab

• Very poorly studied subspecies behavior, physiological, parasitological data might be collected
• Regular assessment of animal health status and compliance with release criteria is needed
• Scientists can communicate with general public increasing awareness in terms of:
  1. General seal biology, threats and population status
  2. Pup stranding causes and consequences (why we do it)
  3. Rescue procedure and rehab protocol
  4. Under the situation of poorly developed official procedure for rehab permitting by state authorities in Russia, scientists can advocate the necessity of rehabilitation based on scientific data available.
Thank you!