

Implementing an Ursid Neonatal Care Program

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Adequate Staffing

- Four levels of care for hand-rearing team
- Developmental stages dictate skill criteria
 - Neonatal
 - Growth
 - Weaning

Hand-Rearing Coverage

- Amount of attention
- Skill Level
 - Veterinarian
 - Vet Technician
 - Curator
 - Keeper

Hand-Rearing Needs

- Thorough evaluation
- Close Monitoring
- Developmental Phases

Level One 24 – 15 hr shifts

Neonate Requires



- Intensive physiological monitoring
- Intensive medical support therapy
- Maximum number of caregivers = 7 or fewer
- Sensitive to multiple handlers

Poor immune system reported in Giant Panda Neonate (mother-reared and hand-reared)



**Cause of death
was pre- and post-natal
bacterial infections**



What issues can interfere with adequate transfer IgG?

- Poor maternal immunoglobulin titer
- Poor colostrum quality
- Inability to nurse
- Orphaning
- Older immunodeficient neonate is one that has passed the point of gut closure
- Infants with absorption problems (diarrhea)



Administering maternal serum subcutaneously (SQ) or 7.5 – 15cc per 100 g exceeds the volume that a newborn can safely ingest during the first 16 hours after birth

Level Two 24 – 15 hr shifts

Neonate Requires

- Moderate physiological monitoring
- Moderate medical support therapy
- Stay with established core team 7 or fewer
- Sensitive to multiple handlers



Level Three 24 – 15 hr shifts

Neonate Requires

- Physiological monitoring
- Ø Medical support
- Stay with established core team 7 or fewer
- Sensitive to multiple handlers



Level Four 8 hour day Neonate Requires



Level Four 24 – 15 hr shifts

Neonate Requires

- Doesn't require medical support
- Stay with established core team (<7)
- Introduce additional staff as needed
- Not sensitive to multiple handlers

Objective

- Physically and psychologically productive adult
- Environmental manipulation natural behaviors
 - Encouraged or discouraged
- Controlling imprinting
 - reduce inaccurate imprinting

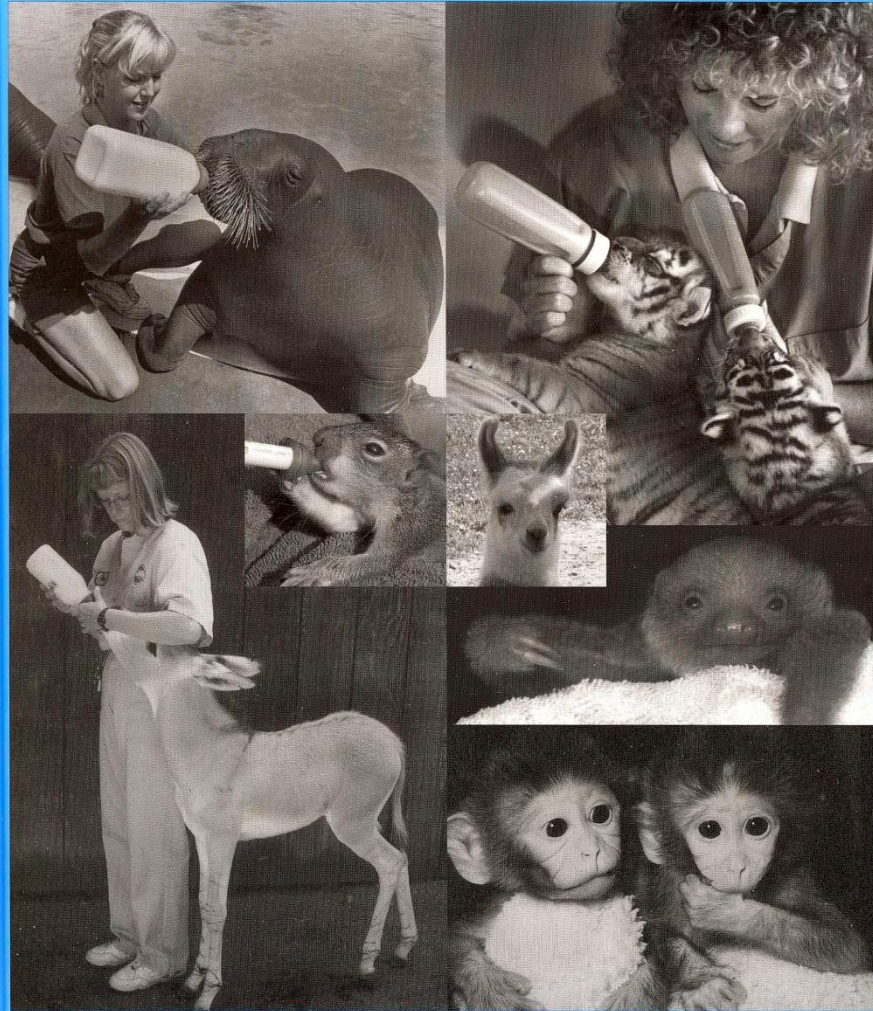
Communication



- Understand procedures
- Keep detailed records
- Communicate effectively
- Communicate often with others

Hand-Rearing Wild and Domestic Mammals

Laurie J. Gage, DVM



Workshop

Quality & Consistent Care

- Well trained professional surrogates
- Proper nutrition
- Essential equipment
 - Twin Swapping

Workshop

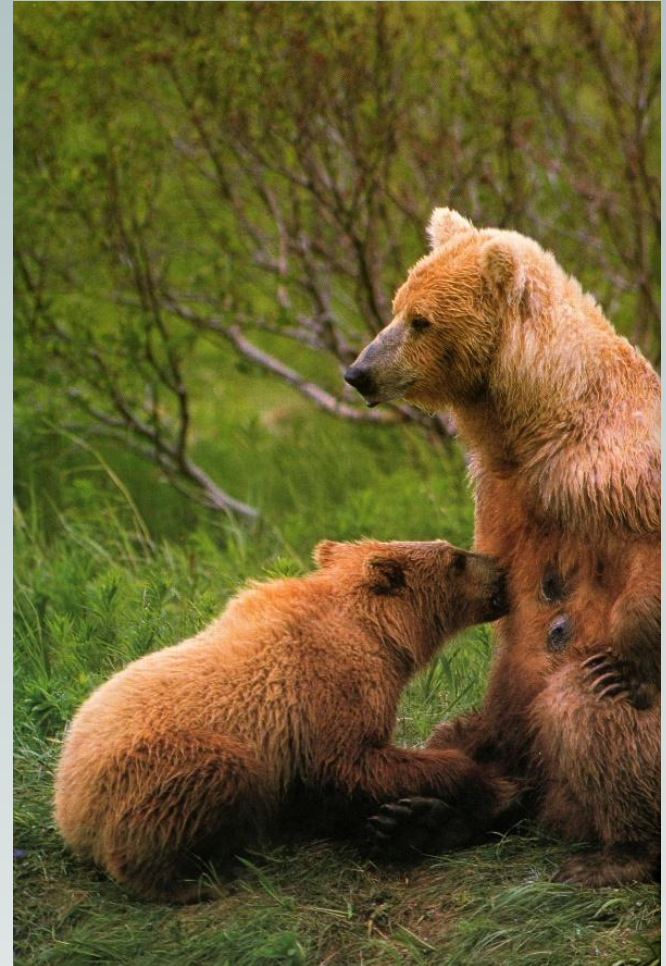
Behavioral Aspect

- Genetically controlled
- Environment can effect quality of psychological development

Workshop

What is IgG

- Create serum bank
- Institute protocol



- The serum can provide a significant safety factor against prenatal or postnatal infections and act as a natural antibiotic
- May need to be repeated in 4 – 5 weeks if animal was compromised at birth
- Serum is also used as part of the total fluid replacement calculation of 100 ml/kg per day
- Collect, store and freeze serum that can be made available to other facilities.

Questions?

**Answers In
The Workshop!**

