Giraffe Preventative Medicine Guidelines

Recommended Preventative Medicine Guidelines for Giraffe (Giraffa camelopardalis sp.),

Preventative medicine is key to providing long-term health care for all animals, including giraffe (Giraffa camelopardalis sp.). Use of a preventative program helps to avoid intra- and inter-specific infectious disease, developmental problems, and in the long term management is cost effective.

Giraffe are commonly kept in zoological facilities and generally present few problems. In many instances however, giraffe can be difficult to clinically manage, due to the mechanics of dealing with a megavertebrates. Operant conditioning, even with limited physical facilities, may assist with the evaluation of captive giraffe and is encouraged. A preventative health care plan should also address the social and psychological needs of the individuals and the group as a whole. Activities that stimulate normal behaviors have beneficial physical effects on the animals and make for better display animals as well. Use of browse is strongly encouraged for this and other health effects addressed in the nutritional section.

Physical examination

Giraffe are difficult animals to physically examine due to the inherent dangers of manual and chemical restraint. In general, current recommendations advise against yearly immobilization for physical examinations until safe methods for routine sedation and handling are defined. When performed, a physical examination should include;

1. Visual examination during normal ambulation for symmetry, gait, and overall appearance.

2. Verification of permanent identification (microchip, tattoo, ear tag, patterning, etc.).

3. Physical examination to include auscultation, hoof condition and wear, ophthalmic and aural exam, visual assessment of the external genitalia, haircoat density, dental assessment, EKG when possible, etc.

4. Clinicopathologic assessment:
A. Bloodwork to include:
   a. Complete blood count
   b. Serum chemistry panel
   c. Mineral panel
   d. Serology to include Leptospirosis sp (17 serovar panel
      - Appendix II),

Malignant Catarrhal Fever, Bluetongue, Brucellosis, *M. paratuberculosis*,
and New World West Nile virus status.

B. Routine urinalysis.

5. Estimated or actual weight.

6. Fecal analyses
   
   A. Parasite screen- fecal flotation, direct.
   B. Enteric pathogen screen; salmonella, campylobacter
   C. *Mycobacterium paratuberculosis* surveillance- 3 fecal cultures
      (see Appendix).

7. Tuberculosis (TB) test- intradermal testing can be performed in the
   caudal tail fold with 0.1cc Bovine PPD as opportunity arises. It is not
   currently recommended to immobilize giraffe on a routine basis for
   tuberculosis screening unless clinical signs support testing, a history of
   tuberculosis in the herd warrants screening, or impending shipment is to
   occur.

8. Recommended vaccinations-
   A. Giraffe are susceptible to *Clostridium tetani.*\(^4\) Vaccination with
tetanus toxoid should be performed every other year or
   opportunistically.
   B. Other vaccination for infectious disease (*Leptospirosis* sp., rabies,
      etc.) is left to the discretion of the institutions and perceived risks.
   There are no reported infections with New World West Nile virus in
   giraffe and vaccination is not recommended at this time.

9. Prophylactic treatments as needed
   A. Ivermectin
   B. Vitamin E/Selenium
   C. Pyrantel tartrate
   D. Fenbendazole

10. Hoof trimming
Some animals can be conditioned to allow routine hoof trimming in a restraint. Hoof trimming should be performed as needed to prevent long-term problems.

Parasite Control

Routine fecal examination (minimum twice yearly) should be performed on all individuals. Persistent parasitemia should be addressed with rotational anthelmintics based on a comprehensive parasite program. Larval drug resistance can be determined prior to developing any deworming program as resistance has developed in giraffe herds in certain areas. Testing can be performed with Dr. Tom Craig at Texas A&M.

Literature cited


Appendix I

1. Fecal specimen testing for M. paratuberculosis from giraffe.
   a. Collect at least 3 grams of feces daily for 3 days. Refrigerate specimens until the third specimen is obtained, place in seal able baggies or large seal able plastic tubes, place on ice and ship via overnight express to; Johnes Testing Center University of Wisconsin School of Veterinary Medicine 2015 Linden Drive, West Room 4230
2. Serology specimens for *M. paratuberculosis* ELISA and AGID.
   a. Collect 1cc of serum in sealable plastic tubes and send on ice to;
      Johnes Testine Center
      University of Wisconsin
      School of Veterinary Medicine
      2015 Linden Drive West, Room 4230
      Madison, WI 53706-1102
      Phone (608) 265-6463

Appendix II

1. Leptospire titers-
   a. Collect 2cc of serum in sealable plastic tubes and send on ice sent to;
      National Veterinary Services Laboratory
      1800 Dayton Road
      Ames, IA 50010
      Phone (515) 663-7266