A FIELD GUIDE TO AZA ACCREDITATION FROM A NUTRITION PERSPECTIVE

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Introduction

The Association of Zoos and Aquariums (AZA) maintains a rigorous accreditation process in order to ensure that AZA-member zoos meet the highest standards of animal care, welfare and management; veterinary care; business management; education; and conservation responsibility. This process is managed by the Accreditation Commission, and is implemented at individual facilities via the inspection team (a team of three - four individuals, comprising several fields of expertise to cover most areas of zoo operations). The accreditation preparation process is lengthy and detailed, covering all aspects of zoo management, not only animal-related issues.

There are two main parts of the AZA Accreditation Commission Visiting Committee's inspection – reviewing the institution's written submission and the on-site inspection. The written submission includes answers to AZA-requested information and all associated support materials. From the written submission, the team gets an initial impression of the operation and develops any potential questions they may want to ask while on-site to assess the operation in more detail. The on-site inspection allows the team to assess whether the written submission corresponds to actual practices, and allows them to develop and ask additional questions. It is important that the written submission complements the on-site inspection, and vice versa.

The Written Submission

Within the written submission for the AZA Accreditation Application, the primary focus of question **VC-21** is nutrition (as of July 2013). The simple request is to, "attach a description of your institution's animal food nutrition, acquisition, and preparation program, which addresses nutritional philosophy, acquisition policy (from well-managed or sustainable sources or fisheries), quality assurance and control, storage, inventory, and stock rotation. Include the most recent food analysis report. (include your institution's basic policy, list where your institution obtains supplies, brands used, etc)."

Such a broad request would likely address most of the detail needed by the team. This first section can be a bulleted list, or can be a series of descriptive paragraphs, as long as the appropriate information is conveyed accurately and concisely. Within the accreditation standards, there is a separate section of policies that help detail the specifics of what the committee hopes to interpret from your written materials, and hopes to see (in practice) upon visiting your facility. This includes sections 2.6.1 through 2.6.4. Additional information within the written submission to address these sections is useful to ensure both the institution and the accreditation team are clear on the policies in place. Sections 2.6.1 to 2.6.4:

2.6. Nutrition

2.6.1. Animal food preparation and storage must meet all applicable laws and/or regulations.

2.6.2. The institution should have a written nutrition program that meets the behavioral and nutritional needs of all species, individuals, and colonies/groups in the institution. Animal diets must be of a quality and quantity suitable for each animal's nutritional and psychological needs.

Explanation: Nutrition programs should be developed using the recommendations of appropriate AZA TAGs or SAGs, and the AZA Nutrition Advisory Group (http://www.nagonline.net/Feeding%20Guidelines/feeding_guidelines.htm.) Diet formulation criteria should include each animal's individual history and natural history, feeding ecology and behavioral needs. Meat processed on site must be processed following all USDA (or federal) standards.

2.6.3. The institution should assign at least one person to oversee appropriate browse material for the animals.

Explanation: If the institution uses browse plants as part of the diet or as enrichment items for its animals, the items must be identified and reviewed for safety. The responsibility for approval of browse items and oversight of the program should be assigned to at least one qualified individual. The program should identify what plants are safe to feed and to which species, which parts of the plant are safe, whether the browse plants have been treated with any chemicals or if they are near any point sources of pollution. If animals have access to plants in and around their exhibits, there should be a staff member responsible for ensuring that the animals are not exposed to toxic plants.

2.6.4. If not in separate buildings, animal food preparation areas must be physically separated from other functions such as the animal hospital (including animal treatment, isolation, holding, deceased animal storage) and employee lounges. Animal food must not be stored in the same area as animal drugs. Animal food and human food must not be stored in the same location (refrigerators, freezers, etc.).

Nutritional Philosophy

- The overall diet formulation / nutrition philosophy (potentially outlined in the NAG feeding guidelines, but may include other inputs) including use of individual history, feeding ecology, and behavior.
- The process by which enrichment items are included in the diet formulation and evaluation process (how are these items and amounts captured).
- Keep in mind that ingredient analysis (single items) is different from diet analysis (diet in totality). Your response should include the process by which diets are evaluated (diet in totality) and changed, if necessary (not only the analysis processes, but also the communication processes to achieve diet changes).
- How and where diet records are maintained
- Where and why food consumption records are kept, the process for follow up on these data
- An overview of the reporting structure that contains the diet preparation operation
- Composition of the staff responsible for food handling and diet preparation

Diet Preparation

- Training provided on safe food handling/sanitation/safety in the workplace.
- Details on how food is handled within the commissary as well as the animal collection areas (thawing of meat and fish, produce sorting and washing, operating within safe temperatures zones, etc).
- How often and by what means is food dispersed to the animal collection
- List details describing the composition of your meat mixes in relation to USDA inspection and adherence to the NAG feeding guidelines.
- Sanitation methods
- Separation from nonfood preparation areas – animal health and staff areas
- Provide a schematic layout diagram of the animal food preparation facility / area, with pertinent spaces concisely and clearly labeled. It is a good idea to also have this in-place in your facility
- Describe measures that are in place to avoid/eliminate cross-contamination within the operation (http://www.fda.gov/Food/GuidanceRegulation/HACCP/ucm2006810.htm).

Acquisition and Purchasing Policies

- Statements on the sustainability of practices used by the suppliers and process by which suppliers are evaluated including sustainability of feeder animals (fish, reptiles, etc) and acceptable euthanasia techniques.
- List of vendors used to source food items and/or a list of brands used within the operation.
- Details on how your vendors are generally chosen (lowest price, best value, other evaluation criteria).
- Note where contracts are used for purchasing
- A working list of vendors
- Staff responsible for the browse procurement operation (individuals, their qualifications clearly shown for inspection team) and safe collection of browse for the institution, and what policies and procedures exist to ensure safety.
- The browse procurement operation (how, when, where).
- List of approved browse species used for the animal collection.
- List of locally common toxic plants if the institution has such a list.
- If plants in exhibits and adjoining spaces are managed differently than the collection of browse, describe who is responsible for those areas (and qualifications).

Quality Assurance and Control

- Overview of the quality control measures in place for visual, nutritional and microbiological assessment.
- Frequency of sampling, and the typical methods used to analyze feeds (and recent results – within the last six - 12 months) nutritional and microbiological parameters measured.
- Institutional Standards/guidelines used to assess quality control results.
- Recent quality control results back up by a chronological history of analyses, not just from the month prior to the committee's inspection).
- How pests/pest control is monitored in food areas
- Check points in place to assure quality control prior to assessment of final products (areas with hazard analysis critical control point programs in place).
- Description of tracking system to handle food recalls, FDA tracking requests

Storage, inventory, and Stock Rotation
- Description of the storage spaces around the food prep facility
- Description of the inventory process used and how stock rotation is handled in specific areas.
- Methods to ensure proper temperatures are maintained in food storage areas

The On-Site Inspection
When the accreditation Visiting Committee team performs their on-site inspection, they have a considerable amount of facilities to inspect and questions to ask. Nutrition and the diet provision process is one small aspect of the entire process. It is recommended that you review your written submission prior to the on-site inspection (especially if the time is protracted between the two).

There is potentially a lot of work that needs to take place prior to the on-site inspection to get facilities in order, but based on the complexity of the operation and the complexity of the rest of the facility, time actually spent by the AZA team with the nutrition-related aspects of an operation can be quite limited. It is important that every aspect of the operation is "inspection-ready" and can be viewed/reviewed with ease. Keep in mind that a lack of time spent doesn't translate into a lack of directed inquiry, any assignment of importance, or a lack of interest on the part of the inspectors. Preparation for accreditation should start with preparation for a USDA inspection as a guide.

Considerations for the on-site inspection include:
- All areas should be neat, tidy, presentable, and free of clutter
- No cobwebs, dust, or other visible gross filth (no complete feeds, produce, etc, on the floors, behind things, under things)
- Appropriate food service sanitation is in place and obvious (prep areas, personnel, utensils, containers, etc)
- Appropriate pest management measures are in place (exclusion, traps, etc. No visible pest excreta, bodies, etc)
- Appropriate temperature monitoring devices are in place and evidence of historic use is clear via documentation
- Inventory assessment and management procedures are obvious and clear through practice and documentation.
- Chemical storage locations are appropriate and safe
- Material Data Safety Sheets are readily available, accessible to all staff
- All food items are in sealed and clearly labeled containers, all boxes in freezers are closed, items thawing are sealed and/or in containers, or covered with plastic wrap
- All diet records are easily accessible

The Final Word

The AZA accreditation Visiting Committee's inspection serves as one of the means by which AZA helps maintain the standards of its member zoos. The team is a tool by which the member zoo is measured, and this peer review can help improve operations for the good of the animal collection and the zoo as a whole. It is the role of the member zoo to ensure that every aspect of the operation is in the best presentable condition prior to the inspection, that is "inspection ready". From a diet and nutrition standpoint, this paper outlines some of the main aspects for this readiness, but is not all-inclusive. It is the responsibility of the zoo and those focused on the diet and nutrition components of the operation to ensure compliance and, ultimately, success of operation in the eyes of fellow AZA professionals.