

Which way forward for European Zoo Nutrition?

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Introduction

There are approximately 1000 zoos in Europe ranging from large, extensive zoos to smaller private collections. Of these, 256 are members of the European Association of Zoos and Aquarium (EAZA). EAZA is involved in all aspects of maintaining animals in captivity in zoos and aquarium, including the conservation of threatened species. Just as AZA has established Species Survival Plan (SSP) breeding programmes, the EAZA established the European Endangered Species Program (EEP) which co-ordinates and stimulates endeavours promoting conservation. A subdivision within the EEP, the Research Working Group, has in recent years attempted to raise the profile of zoo nutrition and nutrition-related research without much success.

Yet providing a good diet, which fulfils as many aspects of a natural diet as possible should be an essential consideration for improving the welfare of zoo animals and there is still much we do not know or understand. Therefore, in 1998 a group of people from European zoos and universities, all with a particular interest in zoo nutrition, took the initiative to stimulate European discussion in this field. Exchange of ideas, information and results is vital when developing zoo animal diets. The idea of holding a European conference focussed on zoo animal nutrition was suggested although the organising committee had first to decide:

- Is there enough enthusiasm for a European zoo conference?
- Will an initiative be supported by the Research Working Group (of EEP), universities and the zoo food industry?
- What is the current status of zoo nutrition within Europe?
- How should we continue after a conference?

The diversity of European nationalities participating even at the preliminary stages of discussion suggested that there would be sufficient interest in an international conference on this topic. Universities and the zoo food industry also welcomed the initiative and the Research Working Group became actively involved. A questionnaire was sent out to investigate the current status of European zoo nutrition, with a round table discussion planned at the end of the first conference to decide how to progress.

Status of European Zoo Animal Nutrition

An investigation of the current status of zoo nutrition was conducted by means of a questionnaire sent to 177 European zoos, 64 research institutions and 48 food manufactures in 30 European countries.

Responses were obtained from nearly 50% of the zoos, 11% of the research institutes and 13% of the food industry. The most important results were:

- 20 % of European zoos employ an animal nutritionist.
- 28% conduct nutritional research.
- 75% of the zoos thought they had or still have nutrition related diseases
- 83% of the zoos would like additional nutrition research
- 20% of the diets are registered on a computer
- 68% of the diets are written down on paper
- 13 % of the diets are not recorded in any manner

Most of the European research institutions conduct the majority of their nutritional research on domestic and pet animals although some are also interested in zoo animal nutrition. The zoo food industry do not seem favourable disposed towards joint research projects or to producing basic zoo nutrition research information.

First European Zoo Nutrition Meeting

At the beginning of January 1999 the First European Zoo Nutrition Meeting was held in Rotterdam in the Netherlands. 185 delegates from 29 countries attended the conference. Most were European, however participants also travelled from the Republic of China, New Zealand, USA and Canada. Congress participants represented not only zoos but also the zoo food industry and nutrition research institutes. More than 40 talks and posters were presented over several sessions: introduction, organism, behaviour/feeding ecology, methods and applications.

A number of presentations (13 in all), dealing primarily with general aspects of zoo nutrition were compiled in a special edition of the EAZA newsletter, which was sent to all conference participants and EAZA members. The aim of the newsletter was to announce the formation of the European zoo nutrition group and provide a forum for their ideas about how zoo nutrition should progress in Europe. The newsletter also contained articles about starting a nutrition program in a zoo and practical points to consider when undertaking this process. The remaining papers, both applied and theoretical, are to be published in the proceedings, which will appear in bookform at the end of 1999.

Round table discussion

A roundtable discussion was held at close of the meeting, to help decide the way forward for zoo nutrition in Europe. Some of the most important points are summarised below:

- The research group of EAZA develops and instigates research based on need, including projects on zoo nutrition, but is not a service to advise on the interface between zoos and science.
- Although there are advantages and disadvantages to doing so, the general consensus was that there should be a European branch of an already established organisation e.g the Nutrition Advisory Group (NAG) of AZA, rather than forming an entirely new group. However, if annual meetings are always held in the same part of the world they may deter some potential participants from attending.
- There are relevant groups working in Europe but they are predominately involved with livestock. Some groups which are involved with zoo animal nutrition include the Nutrition Society in the UK, The European Society of Veterinary and Comparative Nutrition, Institute for Zoo Biology and Wildlife Research in Berlin, Fachgruppe Zootierernahrung im Zoo in Germany, the French Zoo Nutrition Group (Nutri-Zoo) and the Pet Bird Nutrition Group in Hanover.
- It was noted that Europeans could, if they satisfy the membership criteria, join the NAG and/or Comparative Nutrition Society.
- A plan to bring together information relating to all aspects of nutrition from many different European countries was welcomed. Internet and e-mail can help to develop such a centre.
- A questionnaire will be sent to all the participants asking for specific feedback about the zoo nutrition meeting.

Questionnaire

A third (36%) of the questionnaires was sent back. Of those 61% felt that the balance between applied/practical talks and scientific/research presentations was about right, 31% were more than happy with the balance and the remaining were unhappy and would have preferred more practical talks. Most liked the length (three days) of the conference. Everyone agreed that there should be more European Nutrition meetings in the future and the majority preferred that this be a biannual meeting. 24 people would provisionally join the committee to distribute nutrition and 16 participants showed interest in helping to organise the next conference.

Feedback from the questionnaire also suggested that future meetings should devote more attention to aspects of feeding behaviour and behavioural enrichment through feeding methods.

Conclusion

The enthusiasm of the participants and results from the questionnaires has encouraged the organising committee to continue promoting zoo animal nutrition in Europe. Agenda points at the next meeting will certainly include extending the organising committee,

setting zoo nutrition targets, customising/developing zoo nutrition software, improving communication between zoos and planning the Second European Zoo Nutrition Meeting.

See you next time in Europe?