



Course Title:	Advanced EAZA <i>ex situ</i> Programme Management
Tutors:	Dr Kristin Leus, EAZA Population Management Centre, CPSG Europe Programme Officer, Copenhagen Zoo
Aimed at:	Experienced staff from the EAZA Population Management Centre ESB and EEP coordinators that have completed the Basic Breeding Programme Management/Introduction to EAZA <i>ex situ</i> Programme Management course
Stage:	3
Language taught in:	English
Taught hours:	22 + 6.5 (3.5 days + 1 optional day)
Extra hours for study etc:	Varies from studbook to studbook
Cost:	EAZA members: €315 Non-members: €395
Minimum group size:	10
Dates:	14 – 18 January 2019 (Optional ZIMS for Studbooks training on 14 January)
Delivery Method:	Combination of face to face and independent learning before the course
Location(s) :	EAZA Executive Office, Amsterdam, Netherlands
Links to other courses:	Follows on from Basic Breeding Programme Management/Introduction to EAZA <i>ex situ</i> Programme Management course

Course Aim(s):

This course aims to teach the process of producing a long-term management plan for the *ex situ* population, as well as the annual breeding and transfer recommendations to implement the management plan. The course provides an in-depth understanding of the genetic management of *ex situ* populations including in-depth training in the use of specialised *ex situ* population management software (PMx).

Using your own studbook dataset, you learn to identify problems and issues in your dataset that need addressing before a successful population analysis is possible, how to create an analytical studbook to potentially overcome gaps in your population's pedigree, how to set genetic and demographic goals for your programme and how to create recommendations based on genetic and demographic analysis to achieve these goals.

Learning Outcomes:

By the end of this course you will be able to:

1. Prepare studbook data for analysis and create an analytical studbook if applicable to the data
2. Carry out demographic and genetic analysis to create goals for your population and formulate breeding recommendations to achieve those goals
3. Organise a masterplanning process for your managed population

Contents:

SECTION 1: PREPARING STUDBOOKS FOR ANALYSIS

- Routes available to ESB/EEP keepers to get help with data clean up and aspects of studbook data clean up most important to analysis and masterplanning
- Thought processes for an analytical studbook/which assumptions and why/mechanics of creating an analytical studbook
- Exporting from ZIMS for Studbooks to PMx (technically and use of filter settings)
- Importing export files into PMx /basic principles of the PMx programme

SECTION 2: DEMOGRAPHY

- The basic theory of growth rate calculations, life tables
- Life table results in PMx/distinguishing sense from nonsense/smoothing process
- The basic theory of projections from life tables and age pyramids (stable/non-stable)
- Projected growth rate in PMx; difference between a deterministic and stochastic model
- Census

SECTION 3: GENETICS

- Refresh genetics of small populations (in captivity)
- Which individuals to include and why/why not and where in PMx to exclude them
- Run genetic calculations
- Interpret the main population statistics and founder statistics in PMx

SECTION 4: PROGRAMME GOALS

- Basic principles and theory underlying the setting of goals for zoo populations with different aims (link with Regional Collection Plans and Integrated Conservation Planning/One Plan Approach).
- Set goals for own programme.

SECTION 5: REPRODUCTIVE PLANNING

- Reproductive planning tool in PMx

SECTION 6: RECOMMENDATIONS

- Interpret the main individual statistics/kinship matrix in PMx
- Use of the pairing screen in PMx/use of mean kinship and kinship value
- Recommendations report in PMx

SECTION 7: OTHER FEATURES OF PMx

Assessment:

None

Additional information:

Subject to demand, course participants are invited to attend an optional ZIMS for Studbooks training day on 14 January at no extra cost. The Advanced course itself will take place from 15-18 January.

You will be required to work with the EAZA Population Management Advisory Group (EPMAG) on your data before the course in order to ensure you have a dataset that will enable you to benefit most during the training

You will need to bring your own laptop and studbook dataset to work on as part of this course. We can help you install PMx if needed. Using Mac computers for the course is not recommended – EAZA has a small number of laptops that participants can borrow to use in the course, subject to availability.

How to apply:

Complete an application form (available at <http://www.eaza.net/academy/courses/>) and send it to laura.myers@eaza.net putting the course title in the subject line. Once you have submitted your application you will be contacted to confirm whether you have been accepted onto the training event.