



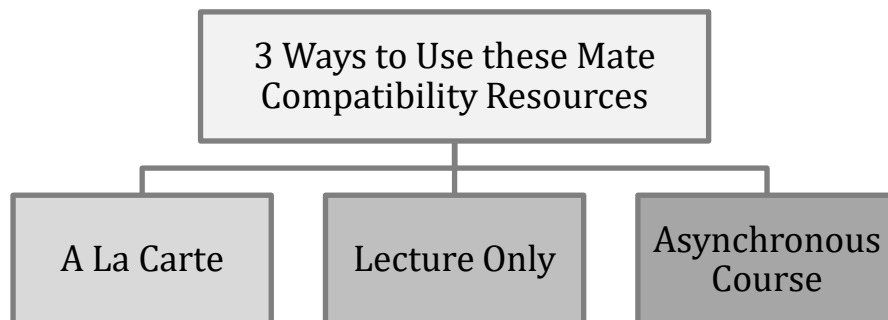
Mate Compatibility for Population Sustainability

RMC Mate Compatibility Workshop

Meghan Martin

The following materials were provided in June 2021 as part of a 5-week virtual workshop. The goal of this workshop, sponsored by the AZA Reproductive Management Center (RMC) in coordination with the Behavior SAG, was to increase our understanding of the factors influencing mate compatibility, a key component of successful reproduction. It provided AZA staff who manage breeding program(s) with a knowledge base for offering mate compatibility within their program(s) to improve the reproductive success of the population and/or specific individuals. The organizers gave an overview of mate compatibility challenges, and guest speakers discussed factors that influence compatibility in a variety of species. Participants identified priority species and issues. Participants were divided into working groups and were provided with examples of techniques for assessing and monitoring aspects of behavioral compatibility. Participants developed a research ethogram and protocol to measure mate choice and compatibility within their institution. The workshop focused on practical methods for offering mate choice, which were beneficial for developing approaches that addressed these issues in the prioritized species discussed. In doing so, the aim was that tools would be developed for promoting compatibility that could increase reproductive success, the basis for sustainable populations. Presentations and supporting materials were provided digitally to all participants.

The RMC is now offering these materials to anyone who would like a better foundation on topics related to mate compatibility. In particular, we think that these materials will be helpful for SSP Coordinators and conservation breeding managers. We envision these materials being used in the following three possible ways:



A La Carte Format

- Low Time Commitment
- Watch what you need, when you need it
- Fills gaps in current knowledge

Lecture Only Format

- Medium Time Commitment
- Watch all lectures in the order they are presented
- Provides a good overview of Mate Compatibility Issues and presents possible ways to carry out research to do a related study if it is needed in the future

Asynchronous Course Format

- Large Time Commitment (3-4 hrs/week for at least 5 weeks)
- Utilize all materials provided in the order in which they are presented (e.g. Week 1 – Week 5). Within each week's folder the expectations for the week are presented, along with the necessary presentations and/or readings and exercises to complete each week.
- Allows individuals with particular Mate Compatibility Issues to get the necessary background and learn how to design a research project to address their mate compatibility concern that can be ready to carry out upon completion of this course.
- As such, individuals interested in using these materials in an asynchronous course format should plan to have at least one Mate Compatibility Issue in mind and be prepared to devote about 3-4 hrs/week for 5 weeks to create a research design to try to troubleshoot their topic. Work for this course will be completed independently.
- *Note: The forms and exercises are to aid in identifying and troubleshooting any mate compatibility issues you might be experiencing at your institution. All PDFs are downloadable for completion when time allows. If you prefer to complete PDFs on the computer, most can be completed online and then saved for future reference. If upon completion of the forms and exercises, you would like further assistance with your mate compatibility issue, please feel free to reach out to Meghan Martin for further advice. Her contact information is provided below.*

Instructors and Contributors:

The following is the list of the individuals who were involved in the creation of this course when it took place virtually in 2021, along with a list of individuals who provided recorded lectures.

Organizers

- Meghan Martin, PhD – Director, PDXWildlife
- Cheryl Asa, PhD – Advisory Board Chair, AZA Reproductive Management Center
- David Powell, PhD – Director of Research, AZA Reproductive Management Center
- Monica McDonald, PhD – Program Scientist, AZA Reproductive Management Center

Presenters

- Meghan Martin, PhD – Director, PDXWildlife
- Cheryl Asa, PhD – Advisory Board Chair, AZA Reproductive Management Center
- Mike Lubbock – Executive Director, Sylvan Heights Bird Park

- Paul Senner – Population Biologist, AZA Population Management Center
- Annie Newell-Fugate, PhD – Professor, Texas A&M
- Jeff Sailer – CEO/Executive Director, Toledo Zoo
- Alison Greggor – Researcher, San Diego Zoo Wildlife Alliance

Contact Us:

Feel free to contact us if you have any questions about these materials or would like additional guidance on a particular Mate Compatibility issue.

Monica McDonald – mmcdonald@stlzoo.org

Meghan Martin - meg@pdxwildlife.com