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Thieves in the Night
Elephant crop-raiding in Botswana

Kruger National Park
Partnership, perception, and poaching

Reconstructing History
A century of African lion conservation genetics

Oil, Gas, Wildlife, & Communities
Capacity building and mitigating conflict in Uganda

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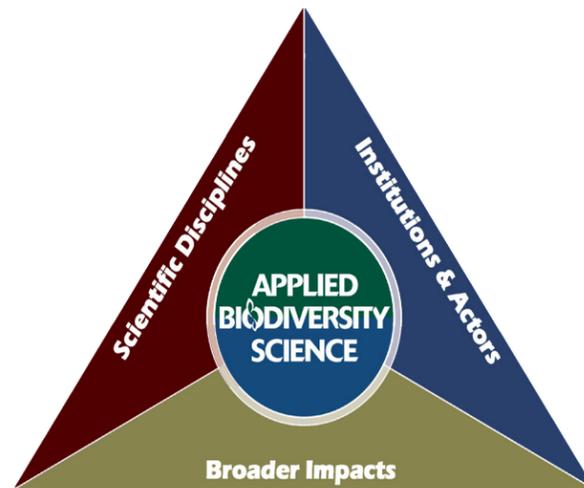
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Since 2007, the Applied Biodiversity Science at Texas A&M has been one of the world's premier multi-disciplinary graduate education and curriculum programs. The ABS Triangle featured above represents the three pillars that support the programs vision:

- 1) Integrated education and curriculum in the biophysical and social sciences.
- 2) Cross-disciplinary research and collaboration with conservation institutions and actors.
- 3) Valuing and applying multiple disciplines to conservation science and practice.

These pillars provide guidance to students, faculty, and collaborators conducting research around the world related to the Applied Biodiversity Science program's two broad themes: a) ecological functions and biodiversity and b) communities and governance. Each article in this year's issue is representative of the ABS pillars and themes, showcasing how broader perspective leads to innovative and meaningful academic research and on-the-ground practices.

Kenneth E Wallen

Ecological Functions and Biodiversity

What local and historical processes determine presence and distribution of biodiversity? How are these altered humans? These are but a few of the ecology-focused questions ABS scholars and other conservationists around the globe are asking in relation to conventional conservation issues.

In her article, "A century of conservation genetics: a comparative study on the African Lion", Ph.D. candidate Caitlin Curry presents her innovative study examining the impact human activity has had on the genetic diversity of the African lion, *Panthera leo*, and the subspecies *Panthera leo melanochaita*. Rather than a conventional genetic comparison, her study is estimating population size based on genetic diversity found within the population,



facilitating the ability for conservation decisions to be made based on the population's genetic health.

The interaction between a species and local communities can be difficult to manage. ABS associate, Erin Buchholtz's article "Theives in the night: elephant crop-raiding in Botswana", introduces us to her study tracking elephant movement patterns, which can inform farmer's decision-making and improve the relationship between elephants and locals in rural Botswana

Communities and Governance

How do political, economic, and historical phenomena influence conservation? How do institutional arrangements affect conservation efforts? These are influential questions whose answers can shape conservation practices, policies, and outcomes.



ABS associate and Ph.D. candidate, Kyle Clifton, addresses some of these questions in relation to the effectiveness of private nature reserve partnership programs in the Greater Kruger in "Partner, perception, and poaching".

In "Oil, gas, wildlife, and communities", ABS professor, Dr. Thomas Lacher, and Dr. Patrick Byakagaba from Makerere University outline institutional capacity-building and education efforts in Uganda to mitigate conflict and threats to biodiversity and communities.

Lauren Redmore, an ABS associate working in rural Botswana, examines the issue of the government's development subsidies and how these direct subsidies from, while effective at providing temporary relief, do not necessarily provide meaningful, long-lasting achievements of human development.



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Bridging Ecology, Culture, and Governance for Effective Conservation

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