Puebloan Agriculture and the Migratory Behavior of Birds

Robin Cordero, Project Director/Co-Principal Investigator, Office of Contract Archeology

Photo by Robin Cordero

Snow Geese fly while Sandhill Cranes forage on the ground at Sevilleta National Wildlife Reserve.

Each winter, the Albuquerque Basin is visited by thousands of migratory birds—cranes, geese, and ducks—who winter in New Mexico, dining on wetland resources and seeds left behind in harvested fields as well as small animals that are attracted to the fields. This was not always the case. Recent research on bird bones (avifauna) by Office of Contract Archeology Principal Investigator Robin Cordero reveals that Puebloan communities of the Classic Period (AD 1300/25-1600) transformed the Central Rio Grande landscape in ways that made it a desirable place for migratory birds to halt their southward travels.

Cordero’s rigorous analysis compares the nature and frequency of avifaunal remains from 20 sites of the Developmental Period (AD 600-1200/1225) to remains from nine sites of the subsequent Classic Period. During the Developmental Period, Puebloans lived in small dispersed hamlets of one to three houses distributed along the Rio Grande and its tributaries. Bird remains are rare in faunal assemblages of this period and winter migrants comprise less than 1% of all non-domesticated bird remains.

The scale of settlements increased dramatically after AD 1300, as populations aggregated into between 12 and 20 100-plus room pueblos. Carefully controlling for sample size and preservation, Cordero’s analysis reveals that bird remains increased dramatically during the Classic Period, both

Continued on page 5
**Director’s Column**

In this issue of The Maxwell we have tried to provide a taste of some of the many exciting things happening at our Museum.

As a university museum, the Maxwell is a center of innovative research, as illustrated by the work of OCA archaeologist Robin Cordero. The Museum is also a center for teaching on the UNM campus and beyond.

UNM faculty and students in Anthropology, Museum Studies, Art History and other disciplines come to the Museum to tour exhibits and research the collections. Our Hibben fellows — graduate students in Anthropology and Museum Studies — work in multiple areas of the Museum, learning the collections and museum skills while contributing invaluably to the work we do. Beyond UNM, school visits, traveling trunks and check-out kits, bring the Museum to thousands of K-12 students per year.

Our newest exhibition, *Intertwined*, is an exciting collaboration between the Maxwell, Museum Studies Program and Museum of Southwestern Biology (with welcome support from the Ortiz Center for Intercultural Studies). It illustrates both the Museum’s commitment to building partnerships and to presenting challenging exhibits. We hope to see you on April 19 for the opening of Drowned River.

Our collections continue to grow, thanks to generous donors like Dr. Virginia Guess, and we are working away on digitizing and improving the care of our existing collections. These efforts rely on our dedicated staff and volunteers and donors. We thank you all, and here pay particular tribute to one of our long term volunteers, Joyce Shalette, who, with her husband Alan, gave so much to the Maxwell. They are both deeply missed.

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**The Guess Donation**

In November 2018, the Maxwell Museum accepted a major collection of iron roof crosses from Chiapas, Mexico donated by retired medical anthropologist Dr. Virginia Ann Guess. The collection includes fifty crosses collected from 1972-2009 in San Cristóbal de Las Casas and Chiapa de Corzo. These are accompanied by photographs and meticulous documentation of provenience. A portion of the cross collection was exhibited in the Museum in 2010 in an exhibit entitled “Forged in Iron: The Expressive Art of the Roof Cross Tradition in Chiapas, Mexico.”

In offering her collection to the Maxwell Museum, Dr. Guess commented, “I developed the collection in order to make specimens [available] as source material for future study and documentation.”

Continued on page 5
Intertwined: The Mexican Wolf, the People and the Land

by Devorah Romanek, Curator of Exhibits

In recent years, museums have increasingly sought to engage a wider range of audiences and a more diverse public, addressing contemporary concerns and inviting in more engagement with content. The Maxwell Museum of Anthropology has, with its series of temporary exhibitions called “Contemporary Issues in Anthropology,” aimed to do just that. The series began a couple of years ago and continues with Intertwined: The Mexican Wolf, the People and the Land, co-curated by me and Kaylen Soudahanh, a recent graduate of UNM.

Perhaps no other animal in North America has been as controversial as the gray wolf, which once numbered in the millions on this continent. Massive reductions of many wolf populations began with the arrival of European settlers. Efforts to conserve the wolf go back only a little over 100 years, having their beginnings right here in New Mexico. The critically endangered Mexican Wolf (Canis lupus baileyi), is a subspecies of the gray wolf native to the Southwest. Historically found in southeastern Arizona, southeastern New Mexico, western Texas and northern Mexico. The Mexican Wolf is currently the most endangered subspecies of wolf in the world.

There is much political tension and controversy about saving the Mexican wolf both within New Mexico and further afield. Many local ranchers, and through extension those with business concerns in New Mexico, worry that the reintroduction and protection of the Mexican Wolf is damaging to profits and resist conservation efforts, while conservationists, biologists, and Indigenous communities know that these apex predators are necessary for the health of the environment in a sustainable and lasting way. The political and social tensions between these two sides, made this topic perfect for the Contemporary Issues series. To tell this story, Kaylen and I approached the topic from various sides, investigating the cultural position of the wolf from mythology to UNM mascot, as well as the biology of the Mexican wolf and its position in the landscape and environment.

The idea for the exhibition was originally pitched to the Museum by Soudahanh with the support of the UNM Museum Studies program where she was studying and the Museum of Southwestern Biology, where she held a position as a Museum Technician and Scientific Illustrator. As the Maxwell Museum moved forward with the idea, Kaylen and I reached out to other individuals and institutions to be collaborating partners and contributors, such as the UNM Museum of Southwestern Biology, UNM Museum Studies Program, the UNM Ortiz Center for Intercultural Study, UNM Special Collections, UNM Center for Southwest Research, the Mexican Gray Wolf Recovery Program, U.S. Fish and Wildlife Service, the Navajo Nation Heritage and Historic Preservation Department, the Philmont Museum at Boy Scouts of America, and the Seton Legacy Project of the Academy for the Love of Learning.

Visitors may consider where they stand on the issues the Museum is presenting, and may at times feel uncomfortable with the information and questions that are being presented. While Intertwined and other exhibitions of the Contemporary Issues series may be challenging for visitors, we hope to open a space for stimulating debate and exchange in the endeavor, as anthropology always does, to question what it means to be human in the context within which we live.

Intertwined: The Mexican Wolf, the People and the Land is on display through July 2019.
Hibben Scholar Spotlight on Adesbah Foguth

Adesbah Foguth is working toward a Master’s Degree at The University of New Mexico in Anthropology with a specialization in Public Archaeology. She has spent her fellowship inventorying, cataloguing, photographing and housing archaeological collections all of which she feels will be important in her future work especially with regards to NAGPRA collections.

Adesbah is researching the usability of photogrammetric models for education and public outreach purposes, and to ensure accurate documentation of heritage sites. She is currently also working for the New Mexico Department of Game & Fish through UNM’s Office of Contract Archeology to photograph and render 3D models of a Pueblo IV petroglyph near Belen, NM, and a pictographic panel and Mimbres granary in the Gila, the latter of which will be 3D printed.

“I want to teach the broader public about indigenous heritage. I think it’s important to have indigenous people teach the world about their land, culture, and indigenous issues. The number one problem with museums and the park service is that they don’t have enough indigenous people teaching others about their heritage. I’m really grateful that the Hibben fellowship exists for indigenous students.

It speaks to the nature of this institution recognizing that there needs to be more indigenous people in heritage management. After having worked as a middle school teacher for many years after getting my BA from UNM and struggling with the differences in Western vs Diné approaches to education, I began working with the National Park Service to provide more locally relevant, hands-on education. I decided to apply for the Public Archaeology graduate program at UNM to become an Interpretive Park Ranger for the National Park Service at Canyon De Chelly National Monument. As a ranger, I am excited to experience the freedom to design indigenized curriculum for visitors, to have more ability to engage with local Diné youth through conservation projects both within the park itself and in local communities, and, most importantly, I am excited about the prospect of working directly with local Diné communities on issues concerning the protection and preservation of their land, culture, and history.”

Check out Adesbah’s Sketchfab profile to see 3D photogrammetric models at Sketchfab.com/afoguth
Puebloan Agriculture and its Impact on the Migratory Behavior of Birds

Continued from page 1

in overall frequencies and in the importance of wintering species. Overwintering cranes, geese and ducks had become important components of Puebloan diets, comprising between 45% and 63% of total non-domesticated bird assemblages.

Drawing on recent studies of rapid changes in migratory bird flyways in Europe in response to agricultural expansion, Cordero attributes these changes to the transition from dispersed Developmental Period garden plots to the large Classic Period agricultural fields necessary to support the larger and more dense human populations. The creation of large tracts of agricultural fields provided abundant winter feed for migratory birds. Rather than complete their long flight from the Arctic to Mexico, the birds halted their travels along the Rio Grande. Indeed, Cordero suggests that Puebloan farmers may have increased the attraction of their fields by leaving unharvested grains behind to encourage the flocks to stay nearby. Thus, when Coronado’s expedition reached the Albuquerque Basin in the winter of AD 1540, expedition chronicler Pedro de Castañeda observed:

“A very large number of cranes and wild geese and crows and starlings live on what was sown, and for all this, when they come to sow for another year, the fields are so covered with corn which they have not been able to finish gathering.”

To learn more about Cordero’s exciting research, his full article “Puebloan agriculture and its impact on the migratory behavior of birds” appears in the 2018 in Kiva (Volume 84:1, pp. 85-109).

The Guess Donation

Continued from page 2

In addition to the crosses, Dr. Guess has also donated eight ceremonial hats from Chiapas worn by indigenous men, as well as a folio of illustrations of men’s ceremonial attire, including the hats, from all of the villages in that state.

The Guess Collection donation represents an important addition to another significant donation of Mayan materials, especially textiles, from the late Emeritus Professor Robert Holzapfel in 2016. Together these donations establish an important resource for research, interpretation, and exhibition. Dr. Guess hopes that her donation might be further expanded both through her continued donations and those of others.
Joyce Cohen Shalette, longtime volunteer at the Maxwell Museum, died peacefully December 10, 2018 in her home town of Louisville, Kentucky. She was a graduate of the University of Louisville and earned a Master’s Degree in Education in Chicago where she taught elementary school for over 25 years. Joyce lived for a number of years in San Francisco before retiring to Albuquerque with her husband Alan. She was active in the community and held the position of Vice President of Volunteers at the UNM Hospital. She and Alan were ardent supporters of the Maxwell Museum, producing the Antiquarian Book Fair for over 20 years, teaching bookbinding at the Clark Field Library and Archive and providing financial support for the UNM Museum Studies Program. She shared her generous and open personality with all she encountered. Joyce was preceded in death by her husband, Alan.

Meet Jamie Fowler-Diaz

Maxwell administration is pleased to introduce Jamie Fowler-Diaz, the new Museum Store Manager and Admin 3. Jamie joins the Museum from UNM Admissions and Recruitment where she was a supervisor while simultaneously working various positions at the UNM Bookstore. She is pursuing dual undergraduate degrees in Archaeology and History, is set to complete her degree in 2019 and enter a graduate program at UNM. Jamie hopes her education and lived experience will bring a uniquely New Mexican perspective to the Museum store. She has lived in New Mexico for most of her life, is an avid heavy metal fan and hockey hooligan, enjoys traveling, hiking, sewing, and reading in her spare time. An accomplished seamstress, Jamie ran her own small business for many years designing and selling custom clothing and costumes.

Ancient Civilizations series – Egypt: the Gift of the Nile!

Herodotus, the Greek historian and traveler to Egypt in the 5th century BCE said “Egypt is the gift of the Nile.” The river played a vital role in establishing and sustaining Egyptian civilization. The Maxwell Education Department has recently launched a new Ancient Civilization series artifact check-out kit that provides an incredible look at this fascinating world culture! The kit features historical evidence learned from monuments, artifacts, inscriptions, writings, and preserved human remains for educators to present an evidence based exploration of Egyptology.

For more information about this or 7 other check-out kits, 9 traveling trunks and access to our education collection, visit www.maxwellmuseum.unm.edu or call the education department at 277-2924.
**End of Year Giving: A Big Thanks!**

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CURRENT EXHIBITS

Drowned River:
The Death and Rebirth of Glen Canyon on the Colorado
Opening Reception
Friday, April 19, 6-8 pm

Intertwined:
The Mexican Wolf, the People and the Land

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If you are passionate about the Maxwell Museum and wish to financially support one or more of our programs, please contact Maxwell Museum Director Carla Sinopoli at 505-277-0382, csinopoli@unm.edu. By utilizing our free gift planning services, you may be able to provide a more generous gift than you believe possible!

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