

ARGENTINA



Allan Baker
SENIOR CURATOR
Ornithology

In November and December 2010, Allan Baker conducted fieldwork in Tierra del Fuego, Argentina, to collect material and field data for an ongoing research project on the annual survival, migratory strategies, and population size of the red knot (*Calidris canutus*). The main objective of this research is to determine why the flyway population of this species in the Americas has declined from 95,000 in the 1990s to only 20,000. Data to date indicates that adult survival and recruitment of young is too low to maintain a stable population, and the risk of extinction has increased greatly. More research is needed to determine if the decline is related to the red knot's extreme long-distance migration strategy and the inherent vulnerabilities of its lifestyle.



MANITOBA



Dave Rudkin
ASSISTANT CURATOR
Invertebrate Paleontology

Dave Rudkin's research continues to focus on intriguing fossil discoveries in 445-million-year-old (Late Ordovician age) rocks in Manitoba. This year, he will return to examine outcrops of ancient tropical seabed deposits along the shore of Hudson Bay, near Churchill, where extraordinary remains of rare eurypterids ("sea scorpions"), horseshoe crabs, and other odd joint-legged animals have been uncovered. This collaborative project with The Manitoba Museum, University of Saskatchewan, and Geological Survey of Canada is revealing new and unexpected insights into the ecology and evolutionary dynamics of life in shallow Ordovician seas.



ARGENTINA



Kim Tait
ASSOCIATE CURATOR
Mineralogy

Argentina is known for its unique mineralogy in the area of pegmatites—very coarse-grained intrusive igneous rocks that are sometimes enriched with unusual trace elements. Kim Tait visited several localities there as part of her ongoing research on rare phosphate minerals from these rocks, and brought samples back to the ROM for further analysis. She will continue working with scientists from the Argentine Institute of Snow Research, Glaciology and Environmental Sciences—National Scientific and Technical Research Council (IANIGLA-CONICET), in Mendoza, Argentina. Tait and a team from the University of Manitoba, the Museum of Nature, and IANIGLA-CONICET also described a new phosphate mineral this year, which they named Manitobaite after the province in which it was discovered.



ARMENIA



Dan Rahimi
VICE-PRESIDENT
Gallery Development

A Bronze Age excavation in the Ararat Plain of Armenia has drawn Dan Rahimi to the ancient site of Shengavit. Occupied in the early years of urbanization, this site promises to reveal much about the evolution of cities in the southern Caucasus from about 3500 to 2500 BCE. Rahimi is excavating and studying the flint and obsidian industries of the site in an effort to map patterns of exchange and craft specialization. Early results indicate centralized production and active trading. It is possible that the obsidian was traded far into Mesopotamia. Analysis of trace elements in the obsidian will allow him to track its distribution across the region.



CHINA



Chen Shen
SENIOR CURATOR
Archaeology

During a decade of archaeological fieldwork in northern China, Dr. Chen Shen and his team identified the earliest hominid occupations in East Asia. Shen's research concludes that early hominids (likely *Homo erectus*) arrived at the Nihewan Basin—located some 150 km from Beijing—more than 1.7 million years ago. They left abundant traces of their activities, including stone tools that show wear marks from use. The ongoing search for Nihewan hominid fossils in the area will continue to shed new light on human evolution. This summer, Dr. Shen returns to China to participate in an excavation at the famous Peking Man site at Zhoukoudian, near Beijing.



Where in the world are they?
The who, what, and where from our international curatorial team



Photos: Allan Baker and red knot © Mark Peck, Dave Rudkin, L. Rudkin, Churchill, T. Rudkin, Churchill, Dave Rudkin, Stone tool, Chen Shen