Sandhill Cranes, Sand Dunes and Hot Springs of Alamosa

March 1-2, 2025 1 credit hour. \$225. With credit. \$160. Without credit. Colorado School of Mines Teacher Enhancement Program

View flocks of the 20,000 majestic Sandhill Cranes as they migrate through the wetlands near Alamosa. Hear their bugling mating call and watch their graceful mating dance. Gaze through binoculars, photograph, and learn behaviors and mating rituals of hundreds of wetland birds. See swooping birds of prey and study conservation efforts to try to save the extremely endangered Whooping Crane. Sandhill Cranes, one of America's most majestic birds migrates through southern Colorado every year on its route from its wintering grounds in Bosque del Apache National Wildlife Area near Socorro, New Mexico to its summer breeding grounds near Gray's Lake, Idaho.

Day 1: Class will start in Alamosa, Colorado a half hour before sunrise. We will carpool to the nearby Monte Vista Wildlife Refuge and set up our spotting scopes and binoculars to await the sunrise arrival of the Sandhill Cranes. Twenty thousand Sandhills stop at Monte Vista to rest and feast on the nearby fields before continuing their ancient migration. Sandhill Cranes have been coming to the area for millions of years and were documented in rock art petroglyphs that are 2,000 years old. They stand around 4 feet tall and have a six foot wingspan. Sandhill mating season is March and April, so hopefully we should witness the graceful mating dance of bowing, leaping, cavorting, and calling in their haunting chortling cry. Keep your binoculars and cameras poised for the second treat of the morning as we drive the loop road through the Monte Vista Wildlife Refuge to search for geese, ducks, pheasants, coots, ibis, avocets, stilts, and many other wetland birds.

Journeying to the nearby Great Sand Dune National Park and Preserve. What a geologic treat awaits us as we stand beneath the towering Sangre de Cristo Mountains and learn the history of the Rio Grande Rift, the Laramide Orogeny, and study the mystery of the Great Sand Dunes. Hike, frolic and explore the Sand Dunes after a short tour of the visitor's center. We will explore local flora and see how plants hold the wandering dunes in place. Learn about the history of when this region belonged to Mexico, the Mexican – American War, and the Spanish Land Grants. Search for evidence of the Ancestral Rockies in the Crestone Conglomerate rock formation that makes up parts of the Sangres.

The afternoon we will opt for a captivating experience of touring the Colorado Gators Reptile Park. A natural geothermal warm springs is the site of a tilapia fish farm. An ingenious way to clean up the fish waste is to import alligators from the deep south. These ferocious reptiles thrive in the 87 degree warm waters, sometimes reach 15 feet in length. The Reptile Park is also home to tortoises, snakes, ostriches, etc.

Evening will find us back at the Monte Vista Wildlife Refuge spotting the sandhill's sunset flights, while we search for birds of prey including eagles, hawks, and owls.

Day 2: Dawn will again find us at the refuge listening in awe to the bugling call of the Sandhills and hoping for a chance to spot one of the few remaining Whooping Crane, one of the most endangered birds. Both Sandhill and Whooping Cranes lay 2 eggs, but usually only one hatchling survives. A grand experiment in Gray's Lake, Idaho was to "egg nap" one of the Whooper's eggs and let Sandhill parents raise the chick. The experiment appeared to be working very well, until the young Whooping Cranes

reached courtship age. The mating dance of the cranes appears to be a learned behavior, because the young Whooping Cranes only courted Sandhills and so never reproduced on their own. Today only a few individual Whooping Cranes still migrate with the flocks of Sandhills.

After our early morning wetlands bird tour, we will bask in one of the hot springs of the area. Created by rising magma as the San Luis area is pulled apart by the Rio Grande Rift, numerous hot springs. Native Americans claimed that the waters here were very healing and spiritual. Joyful Journey Hot Springs will refresh naturally. Learn the geology of the hot springs, how they are formed geologically and why there are so many springs in a line from Leadville south into New Mexico.