

## Kinney Run Walking Tour for Stewards of Golden Open Space

### Stop 1. Overview: Kinney Run Open Space (15-20 minutes)

Kinney Run Open Space (KROS) was designated as public open space by the August 1998 plat for the Stonebridge housing development. In June 2003, by Resolution 1573, the City of Golden added additional designations to this important open space:

*The unique geologic areas in the Eagle Ridge area including the Dakota hog back, Cambria Lime Kiln, Kinney Run Trail, and riparian areas are hereby designated as a geologic and environmental education park.*



Educate, Advocate, Protect, Preserve

<https://stewardsofgolden.org>

On this tour, we hope to convey the unique and significant natural and historic features that support the open space designation and merit preservation of this important open space in Golden.

Nestled in a valley bordered by two topographic ridges to the east and the abrupt rise of the Rocky Mountain Front Range to the west, KROS occupies a unique part of Golden. The valley has been carved out over the last 400,000 years by Kinney Run Gulch (KRG) and its tributaries, all intermittent streams draining the Eagleridge/Stonebridge neighborhoods and western mountains. The tributary gulches were preserved as open space and drainage buffers in the Stonebridge neighborhood. KRG runs north through the Fossil Trace golf course and ends in Clear Creek near Coors.

Along much of the valley are the cliff-forming, white Lyons Sandstone on the east and the more easily eroded, red rocks of the Fountain Formation. These very old rocks were deposited by ancient rivers. Originally horizontal, these and all of the rocks on the west side of Golden were tilted during the uplift of the Rocky Mountains millions of years ago. Geologically young dirt (alluvium) several feet thick covers the Fountain bedrock in the neighborhoods west of KRG, creating a gently sloping ground surface. Erosion by KRG and its tributaries created the landscape we see today.

Vegetation in KROS is a mosaic of Foothills Shrubland and Riparian, and rare Mixed-Grass Prairie. Despite the extensive disturbance and planting of non-natives, many native grasses and forbs (non-woody perennials) can still be found in KROS. The vegetation serves as good food sources and shelter for local wildlife. The area is an *eBird Hotspot* with 99 species identified by observation. Elk and deer herds are common throughout the fall, winter and spring, sharing the area with bobcat and coyote families, bears, the occasional mountain lion, and other species.

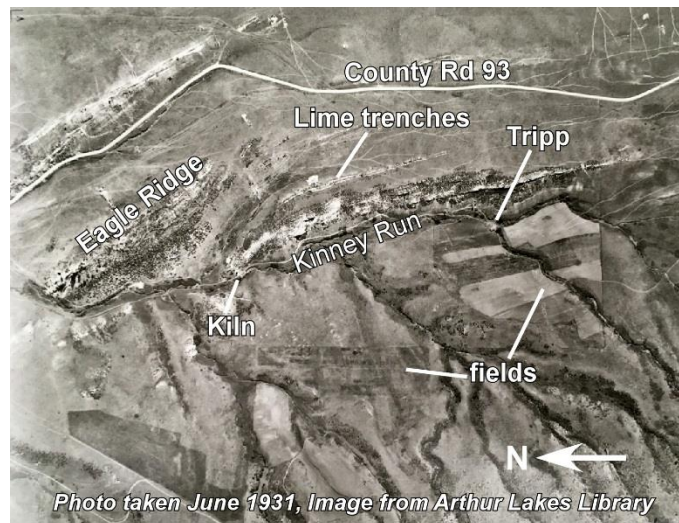
In the middle to late 1800s, the valley along KRG contained a wagon road to the old towns of Apex and Mt. Vernon until County Road 93 became the main thoroughfare around 1900. The Kinney Run road then became a side-road access through and to the Tripp Ranch until 2001.

### Stop 2. Environmentally Sensitive Soils (5 minutes)

A difference in rock cementation creates both the hard-rock cliff in the Lyons Sandstone above you and the crumbly soils in the bedrock near the Trail. Thin crumbly soils are vulnerable to natural erosion that is easily worsened by human and wildlife activity. Care needs to be taken to avoid erosion.

### Stop 3. Historic Tripp Ranch & Kinney Run in 1931 (15 minutes)

The aerial photograph shows KROS in 1931: the historic Tripp Ranch buildings and base of the Cambrian Lime kiln are present. The area was dry-farmed from the early 1900s until about 2000. Part of the old wagon road formed the driveway to the Ranch. The driveway was paved in 2002 when it became a City of Golden trail.



Entering the main part of KROS at the historic Tripp Ranch buildings, the white Lyons Sandstone forms the prominent cliff to the east, creating a well-drained substrate for a vibrant native vegetation community.

Native flowers, Roundtip Twinpod (*Physaria vitulifera*) and Front Range Beardtongue (*Penstemon virens*), bloom in the spring on the rock outcrops of the Lyons Sandstone along with Mountain Mahogany (*Cercocarpus montanus*). Native grasses, Green Needlegrass (*Nassella viridula*) and Needle and Thread (*Hesperostipa comata*), are found around the edges of the Chokecherry (*Prunus virginiana*) thickets below the cliffs. Wetter areas near the creek support both Golden Currant (*Ribes aureum*) and Wax Currant (*R. cereum*), along with Wild Bergamot (*Monarda fistulosa*) and the Cloaked Bulrush (*Scirpus pallidus*).

#### Stop 4: Historic Cambria Lime Kiln (15 minutes)

The historic and unique Cambria Lime Kiln was built in 1879 and used until the late 1890s, when the limestone mortar-industry ended in the Golden area. A railroad spur up KRG served the kiln, taking fired quicklime back to brickworks in downtown Golden. Abandoned trenches where the limestone was



mined are visible on the 1931 aerial photograph. In the Eagleridge neighborhood, the trenches now are covered by houses, but many remain open as depressions in the ground to the north and south.

The last remaining lime kiln in Jefferson County, the Cambria Lime Kiln is uniquely constructed of sandstone blocks, instead of brick. The original tall chimney collapsed in the early 1900s. The Golden

Civic Foundation and the City of Golden restored the base in 2009.

The mined limestone layer, known as the Glennon Limestone, is within the red shaley Lykins Formation east of the Lyons Sandstone ridge. The limestone is a unique and rare type of rock called a stromatolite. It consists of fossilized bacterial mats, originally algal slime formed in a highly saline, shallow ocean.

#### Stop 5: Eagle Ridge (Dakota Hogback) and Pond west of U.S. 6 (15 minutes)

The high ridge to the south is part of the Dakota hogback that extends southward to Colorado Springs. Known locally as Eagle Ridge, the vertically tilted sandstone layers (where the power pylon stands) are rocks of the Dakota Group with underlying Morrison Formation shale to the west. In Golden and at Dinosaur Ridge near Morrison, these rocks have unique and world-famous dinosaur, bird, and crocodile tracks and bones as well as fossil leaves and wood preserved in the sandstone layers. Historically, Eagle Ridge was mined for clay between 1880 and 1905 by GW Parfet.

Eagle Ridge ends abruptly at KRG. This is no accident, but it puzzled early geologists in the late 1800s. The Golden Fault cuts out the Dakota Group rocks as the fault trace trends west toward the mountain front. A backhoe trench dug in 1980 (part of a seismic safety study for Rocky Flats) on the hill to the north showed that the fault is long dormant.

The pond in the bed of KRG was installed in the early 2000s to control storm-water drainage from the Stonebridge development, then being built. The detention pond controls peak storm-flows and allows silt to settle out, improving downstream water quality. It also modulates a permanent downstream wetland area. The wetlands provide important habitat for birds nesting and migrating and, like the KRG are an important water source for the resident and migrating wildlife.

