East and Northeast from Flagstaff

When you drive east or northeast from Flagstaff you soon leave ponderosa country, dropping in elevation to pinyon-juniper woodland, high desertscrub and grassland. The bird species change with the habitats.

Walnut Canyon’s pueblo and pithouse ruins on the north rim of the chasm occupy the margin between ponderosa forest and pinyon-juniper woodland. Sunset Crater is ponderosa country, but much altered by surface lava flows, a lunar landscape created less than a millennium ago. By the time you get to Wupatki you are in high desertscrub and sparse grassland. Here pueblo ruins occupy the verge of the luminous Painted Desert. If you visit nearby Lockett Meadow on the east flanks of the San Francisco Peaks you will gain altitude and moisture sufficient for a lush mountain meadow bordered by aspen and mixed-conifer forest.

Each of these destinations has a sense of drama deriving from our peculiar local geology — high plateau punctuated with eroded canyons and volcanic features. The authors have indulged themselves in a little “geologizing” along with the birding.

Walnut Canyon National Monument

Walnut Canyon was occupied by the Sinagua people more than 800 years ago. Here you will see birds characteristic of ponderosa forest and pinyon-juniper woodland. On south-facing canyon walls the plant community resembles desert with yucca, and prickly pear and hedgehog cacti. Within a few yards the habitat can change to mixed-conifer forest on cliff faces oriented to the north. This destination is fascinating not only for birds,
habitat and ruins, but also for the geologic formations exposed along the way and at the canyon. Flagstaff has such interesting landscapes and vistas because of geologic forces acting over millions of years. Only the most single-minded birder would ignore the geologic history so well displayed.

Our recommended route includes a back road past some man-made lakes in the Continental subdivision. During migration these lakes attract ducks, waders, a few shorebirds and Belted Kingfisher. In winter the Continental lakes have an unexpected concentration of waterfowl and the occasional Bald Eagle.

**Directions:** Starting at City Hall, go east on Route 66/US 89 past the old train station. Set your trip meter here. The round trip is about 22 miles from this point. The following itinerary points out easily seen geologic highlights. For information on hours and fees call the Walnut Canyon Visitor Center at 928-526-3367.

Continuing on Route 66/US 89 at mile 1.6 you will see on the left a road cut exposure of the red Moenkopi Formation, mud and sandstones laid down about 240 million years ago when this area was part of a very wide coastal plain. This is a younger formation in the rock sequence above the Kaibab limestone you will see at Walnut Canyon. The Moenkopi has been eroded away there, but is preserved here by resistant layers of lava flows from the San Francisco Peaks.

Along the way notice how many Common Ravens you see. But beware of confusing them with American Crows as we have lots of both corvids. It wasn't always that way. When Dr. Russ Balda of Northern Arizona University founded the Mount Elden Christmas Bird Count in the late 1960's ravens were quite rare around here. The first raven he reported on a Christmas Bird Count was challenged by an eminent Arizona ornithologist who delivered a lecture on the field marks of American Crows! Today ravens are ubiquitous around town. Being smart and adaptable, they exploit road kill and raid dumpsters. Unfortunately they are also adept nest predators.

Approaching mile 4 exit right at the sign to I-40/I-17. Go over the interstate and continue straight on Country Club Drive heading south. At mile 5.3 a golf course lake on the right attracts waterfowl in migration and in mild winter weather. Bald Eagle, Ferruginous Hawk, and Prairie Falcon are also possible in this area in winter.

Continuing on you come to East Old Walnut Canyon Road at mile 5.6. A left turn and 0.4 mile take you to the Walnut Canyon Lakes which are fed by
treated wastewater. From fall to spring ducks will almost always be present, especially Northern Shoveler densely congregated over the aerators, along with Bufflehead, Ring-necked Duck, Gadwall and others. Migrating White-faced Ibis probe the lakes’ edges. In summer Violet-green, Cliff and Barn Swallows hawk for insects. Opposite the ponds on the bluff look for Pinyon Jay and check the tall pines for Bald Eagle and hawks.

From the Walnut Canyon Lakes the road is unpaved. Heavy snow or rain makes this road impassable for passenger cars. In this case return to the interstate and take I-40 east about 3 miles to Walnut Canyon, Exit 204.

As you leave the lakes driving southeast forested State Trust and Forest Service lands will be on your left, and privately owned grassy fields on the right. Look for sparrows, Western Bluebird, Northern Flicker and migrating flycatchers. At mile 8 the road becomes forested on both sides. There is an outcrop of Kaibab limestone on the left which was deposited in a shallow tropical sea between 265 and 270 million years ago. You will pass through mixed pine-oak forest transitioning to pinyon-juniper woodland. If so inclined stop at mile 9.2 to hike a section of the Arizona Trail. Walk right (south) for an easy one-mile hike through ponderosa forest to the canyon rim. Look for elk and mule deer as well as forest birds. Returning to your car continue to mile 10.8 where you will turn right onto the asphalt road to the monument entrance another 0.4 mile.

The Kaibab limestone you saw along Old Walnut Canyon Road forms the top strata of the canyon walls at the monument. Cliff dwelling ruins are tucked under the natural limestone ledges. Below this you will see a different formation with many diagonal cross-bedding lines. This is the Coconino Sandstone Formation, petrified sand dunes from the time when this area was a great inland desert, a sea of sand much like today’s Sahara.
At the monument the easy Rim Trail is recommended for species like Western Scrub-Jay, Juniper Titmouse, Bushtit, Ash-throated Flycatcher, Black-throated Gray Warbler, juncos and nuthatches. From the overlook behind the Visitor Center look for a 40 foot snag on the canyon floor. For the past several years it has had an active Red-tailed Hawk’s nest. Scan the skies in spring and summer for Violet-green and Cliff Swallows, White-throated Swift, Purple Martin, and possibly Peregrine Falcon. Zone-tailed Hawk sometimes nest nearby, so check for them among any soaring Turkey Vultures.

The Island Trail, 185 steps down to the ruins, is highly recommended for Canyon and Rock Wrens, and Townsend’s Solitaire fall and winter. Interpretive trail signs tell the story of the Sinagua people, their lifestyle, and more about the geology and life zones of the canyon.

Take a different route to return to Flagstaff. From the monument continue on the paved road and cross over the interstate. The road then curves left; don’t enter the freeway. You are now on Old Route 66. In open areas along both sides of the road check for Ferruginous and Rough-legged Hawks in winter. When you reach the “T” intersection turn left on US 89 which will take you back to downtown Flagstaff.

**Sunset Crater Volcano and Wupatki National Monuments**

The cinder cones northeast of Flagstaff represent the most recent convulsion of geologic processes that formed the San Francisco Peaks. Sunset Crater's eruption began in 1064 or 1065, a date established through tree-ring dating, or dendrochronology. The area was populated at the time of the eruptions. Evidence includes “corn molds,” impressions of corn cobs left in basalt as encroaching lava flows vaporized these apparent religious
offerings. Following the zenith of the eruptions new pueblos were built at the place now called Wupatki, which became a trading center for surrounding communities.

In the proposed tour you can find examples of bird species occupying mixed-conifer and ponderosa forest, pinyon-juniper woodland, high desert scrub and sparse grassland. This tour provides a graphic example of the effects of elevation, slope and aspect on habitat type. O'Leary Peak tops out at 8916 feet elevation and in only 20 miles you drop to 4800 feet near the Wupatki Visitor Center.

Winter brings flocks of Mountain Bluebird, Townsend's Solitaire and American Robin feeding on juniper berries in Wupatki National Monument and the lower elevation margins of Sunset Crater Volcano National Monument. But be warned that the birds are far from dense; because of porous soils and the Peaks' rain shadow there is little standing water. In addition to birding opportunities, these national monuments are included for their austere beauty, the spectacular views of the San Francisco Peaks and the Painted Desert, and the fascinating cultural and geological stories told here.

Directions: From downtown Flagstaff go east on Route 66/US 89. After passing Flagstaff Mall US 89 curves north. The proposed tour totals about 70 miles by the time you return to this point. The right turnoff to Loop Road (FR 545) connecting the two monuments is about 11 miles north of the mall. For fees and other information call Sunset Crater Volcano National Monument at 928-526-0502 or Wupatki National Monument at 928-679-2365.

After turning onto Loop Road, pull to the right immediately where monument information signs are posted. The ponderosa forest in this corner is known to be especially birdy for some reason, so look for typical species like Dark-eyed Junco, nuthatches, Mountain Chickadee, Western Bluebird, and Western Wood-Pewee. Hepatic Tanagers have been seen here, but they are uncommon and local.

The left turnoff for a side trip up O'Leary Peak is about one and three-fourths miles from US 89. This little-maintained dirt road, FR 545A, does not require four wheel drive or high clearance, but is not recommended in inclement weather.

FR 545A winds through the ponderosa, skirts along the western edge of the Bonito Lava Flow and then starts a climb up O'Leary Peak where the Forest Service has a fire lookout tower. The road is gated 3.9 miles in at a saddle about 8000 feet in elevation. Here on the south and west-facing slopes you will see ponderosa and pinyon pine, and on north-facing slopes ponderosa
and mixed-conifer forest. May through September there is more bird life here than you would expect. A dozen or more Clark's Nutcrackers are resident on O'Leary. The numerous wind-blasted snags host cavity nesters, and migration can bring warblers, sparrows, and finches. Before returning to Loop Road check any soaring raptors for a possible Golden Eagle.

Soon after you enter the monument, stop at the Visitor Center to see the small museum and ask for a bird checklist. If you have time drive a little farther and walk the interpretive Lava Flow Trail, about a mile in length.

Continue on. Where the road hugs the base of the cinder cone Black Rosy-Finches were seen in mid-winter during an irruptive year, 1996. Consider stopping at Desert View Vista. Along with the views and resident birds you will see a unique combination of pinyon-juniper woodland, shrubs and grasses to interest the botanist as well.

Plan to stop on the roadside soon after the 6000 feet elevation sign to look for Bushtit, Juniper Titmouse, and Sage Thrasher in winter. In summer look for Pinyon Jay and Scott's Oriole which are known to nest here. You may also see Western Scrub-Jay and Ash-throated Flycatcher. The road continues to drop in elevation fairly quickly to high desert scrub. Black-throated Sparrow and Northern Mockingbird are common here.

You will find good birds around the Visitor Center and ruins where there is usually a nesting Canyon Wren pair in season. The reconstructed ball court collects water after a rain and becomes a Mountain Bluebird spa in winter. Birders should be particularly interested to learn that archeologists have excavated 41 macaw burials at the main pueblo, more than at any other site in the Southwest. Macaws were apparently imported from Mexico, evidence of Wupatki's dominant trade position. According to ranger Jessica Korber other bird-related finds include warm robes made from turkey feathers and flutes made from turkey bones.

Be advised that visitors are not allowed to stray off designated trails or roads while in the park, and you will of course want to respect the "residents only" sign near the Visitor Center. But it would be fine to scan the cottonwoods from the public road for Hooded Orioles, Say's Phoebes and Cassin's Kingbirds. And check the wire fence around the sewage ponds as you leave the Visitor Center parking lot. About four miles beyond the Visitor Center, a left turnoff takes you to a viewpoint and lunch area on Forest Service land where you may wander among the junipers. Also walk the marked trail at least as far as the small dry wash which may attract birds in season. MacGillivray's Warbler is a reliable spring migrant.
Returning to monument land visit any ruin of interest. The authors especially like Lomaki, the trail for which skirts a box canyon, very attractive and potentially birdy. Domestic livestock grazing here was stopped in 1989 and the grasses are now pretty healthy. So look for Rock Wren, Morning Dove, Horned Lark and Vesper and Brewer’s Sparrows. Both Western ("pluk" call) and Eastern ("dzzitt" call) Meadowlarks are possible here.

Upon reaching US 89 turn south to return to Flagstaff or continue north to Cameron or the Grand Canyon South Rim.

**Pronghorn**

While many visitors to northern Arizona have seen deer and elk, fewer are familiar with the remarkable pronghorn (Antilocapra americana). They are popularly called “antelope,” but are not closely related to any African antelope species. The name pronghorn is derived from a forward projection or prong on each horn. The horn sheath is shed each year in October–November.

Pronghorns have chunky bodies with long, slim legs. They have a large windpipe, heart, and lungs allowing them to take in lots of air when running. These features combined with an extremely light bone structure help the pronghorn to maintain speeds of 40 mph for several miles, reaching 60 mph in shorter bursts.

Pronghorn are striking in appearance, with a tan and white body and sharply contrasting light and dark markings on the head and neck. Pronghorn eyes are unusually large and biologists believe pronghorn vision is roughly equal to looking through eight-power binoculars. They usually see you before you see them and are quick to place plenty of distance between themselves and possible danger.

Today, approximately 10,000 American pronghorn are found in Arizona, up from a low of about 650 in the 1920’s. Pronghorn prefer flat, open grassland areas between 3,000–7000 feet elevation and feed on forbs, shrubs and grasses.

Cattle fencing often prevents young pronghorn from evading their biggest predator, coyotes. So Northern Arizona government agencies, ranchers and volunteers have removed many miles of superfluous range fencing. In other places, such as along US 89 north of Flagstaff, stretches of cattle fencing have been replaced with a “wildlife friendly” design having a high smooth bottom wire.

—adapted from an Arizona Game and Fish Department release
Lockett Meadow

Lockett Meadow is a high mountain meadow at an elevation of 8600 feet on the east side of the San Francisco Peaks. It is a popular picnicking and camping destination, and hikers use trailheads from here to reach the Inner Basin. The meadow is particularly moist because of its northeast orientation and greater snowfall at this elevation. Wildflowers and grasses inhabit the open areas, and around the edges you will find aspen and mixed-conifer forest. This is always a good place to look for Clark’s Nutcracker. The more ambitious may also want to hike a mile or so up the Inner Basin Trail for forest species including the Hermit Thrush and the Golden-crowned Kinglet.

The geologic origin of the Inner Basin is a matter of dispute. Some volcanologists say the side of the volcano blew out in the Peaks’ last big eruption hundreds of thousands of years ago much as Mount St. Helens did in 1980. Others say the mountain simply collapsed. Subsequent glaciation widened and deepened the basin.

Directions: The best time to visit is late May through September. From downtown Flagstaff go east on Route 66/US 89. After the Flagstaff Mall US 89 curves north. The turnoff to Lockett Meadow is about 12 miles north of the mall, 0.7 mile north of the turnoff to Sunset Crater. Turn left onto FR 552 and go about 1.3 miles to the signed turn to Lockett Meadow. Turn right and follow the gravel road as it winds up around the north side of Sugarloaf Peak before dropping into the meadow, a distance of about 3 miles.
Before reaching Lockett Meadow find the pullout looking northeast toward the Painted Desert. Beyond this spot the road flattens so that you can comfortably walk on both sides of the road. Northern Arizona Audubon Society member John Coons has seen Olive Warbler here in recent summers and suspects they may be regular breeders.

When you reach the meadow first check the meadow’s forest edges for species like Warbling and Plumbeous Vireos, Yellow-rumped Warbler, Red-naped and Williamson’s Sapsuckers, and other woodpeckers like the uncommon Downy and Three-toed. Olive-sided Flycatcher is also uncommon here, but this is a good place to start looking. Irregular irruptive species like Evening Grosbeak, Cassin’s Finch and Red Crossbill can be present and quite numerous some years, but little is known about breeding status.

The Inner Basin trailhead is at the opposite end of the meadow from where you entered it. We recommend you hike up a mile or so climbing at a leisurely pace and birding as you go. (The entire 2 mile hike is well worthwhile if time and energy allow.) The habitat is mixed-conifer forest with a good understory of herbaceous ground cover. Red-breasted Nuthatch is fairly common a short way up the trail. From May to early fall Golden-crowned Kinglet can almost always be found around the Forest Service cabins about 0.75 to 1 mile up the Inner Basin Trail.

The quaking aspen turn golden in early October, but the number of bird species will be noticeably lower than during the breeding season.