



Al-Asad au Natural



Volume 1, Issue 2

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Creature Feature

Special points of interest:

- Have our newest babies invaded the United States? See "Creature Feature"!
- Who's on the nightshift around the office? See "Who's Living Under My CHU?"
- Geology Special! Pages 2&3
- How colorful is a desert morning? Page 4!
- **Next Issue:** This Newsletter will go to the dogs!

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"The gadgets of industry bring us more comforts than the pigeons did, but do they add as much to the glory of the spring?"

- Aldo Leopold on the extinction of the Passenger pigeon.

Eurasian Collared

Dove This week saw the hatching of four baby doves outside the TOC and the HHC. Baby doves are called quibs, and ECDs normally hatch two young at a time. They are named for the black "collar" across adult necks. ECDs are native to SW Europe and Asia, but in the last 100 years have colonized around the world, reaching the Bahamas in the 1970s. The first U.S. sighting was in Florida in 1982, they were confirmed in Ohio in 2001, and nested there in 2007. Often such an invasive species might be considered a threat to native birds, but so far in the U.S. the ECD doesn't seem to be causing a problem. Since they are

sized between the morning dove and the rock ("city") dove, some speculate this is because they have filled the niche left by the extinction of the Passenger pigeon. Once the most numerous bird on Earth, the Passenger pigeon was hunted to extinction between 1800 and 1914. The last wild Passenger pigeon was shot near Picketon, Ohio, in 1910, the last captive bird died at the Cincinnati Zoo in 1914 (the 1st time man



knowingly witnessed the extinction of a species). Only time will tell if the ECD is truly benign or will displace native birds.

Who's Living Under My CHU?

Sand Vipers Averaging 2' (but as large as 42"), sand vipers have been found in both of our office buildings. They are active at night, but can be found resting under vegetation during the day. They have a small horn

made of tiny scales over each eye. Slow and heavy, sand vipers rarely bite if left alone, but are capable of a nasty bite that combines both hemotoxic and neurotoxic symptoms.



Geology Special Edition!

Although Al Asad's airfield sits on a flat plateau, most of the base sits in a narrow valley about 50' deep. How was this valley formed? Without geologic maps or expert analysis I can only present two theories, ei-

ther of which may be true. Western Iraq is a flat bed of sandstone deposited 250 million years ago as the floor of a prehistoric sea called the pre-Tethys Ocean. A tectonic plate containing Turkey, Iraq, and Tibet

called the Cimmeria plate was pushed up and moved north, forming the Tethys Ocean. This ancient ocean would gradually be squeezed and pushed underground over millions of years. The Mediterranean, Caspian, and Black Seas are all remnants of the Tethys. The leading edge of the plate is still being pushed up and forms the Himalaya Mountains, but our area consists of flat, deep layers of sandstone. In many parts of Iraq, the movement of faults has fractured the bedrock buried deep under-



ground (6 km deep in some places), creating underground dams that hold large pools of groundwater and in some cases oil. This is especially true where these fractures are covered by porous sandstone. Because the ground here is high in salt, this underground water is often brackish. The salt content is also responsible for the virtual lack of fossils being preserved in the deep layers of sedimentary sandstone. Water from many Iraqi wells must receive additional treatment to remove salt before drinking. If used for irriga-

tion, over time the salts left behind as the water evaporates on the fields will ruin the soil, contributing to desertification (a problem also found in the American southwest that may have contributed to the decline of pre-Columbian tribes like the Salado Indians who once farmed in central Arizona). The lack of fresh water makes Iraq vulnerable to international sanctions such as blocking the sale of water purification parts and chemicals.

The first theory of how our valley formed is the simplest. When heavy

*A **WADI** is a ditch or valley eroded into the ground by running water from heavy seasonal rains. The sides of the wadi can be further carved by the wind. Wadis are important seasonal wetlands, allowing specially adapted plants such as the deep-rooted tamarisk tree to grow and providing habitat for a variety of birds and animals.*

The Dusty Lens: Pic of the Week!

I have 2 pics this week! The first is another visit with this issue's "Creature Feature", and shows two baby doves by the TOC.

CPT Kaiser submitted the second, which is a nice close up of a Brown-necked raven near the Burger King.



Geology (cont.)

rains fall on a nearly flat landscape, the water will run downhill seeking the easiest path. It will cut into the softest rock, eventually forming a wadi. As the wadi deepens and widens, a valley is formed. Evidence supporting this theory includes the way this valley branches into a larger drainage that feeds the Euphrates River 6.5 miles away. Also, a wadi does exist along the west side of post, and over time may have carved the entire valley. A more complex theory is that we are living

in a young rift valley. Rifts form where two fault lines are pulling away from each other, causing the land in between to subside. Small faults are common in Iraq, and the generally straight and nearly vertical walls give the appearance of this type of valley. The presence of a palm oasis is usually an indicator of a fault line (e.g. Twenty-nine Palms, CA). In the case of the palm grove at the Al Asad oasis, our evidence is flawed because we know the palms were planted by settlers

starting in 1923, hence the straight rows. So it is possible our “oasis” is technically not an “oasis” at all! If erosion wore the valley floor down to where the water table was exposed, this wetland might be more accurately described as a “spring”. Of course the general sense of an “oasis” is a place of refreshment in the desert, so we can probably let the name stand. It is also possible that the wadi has deepened a depression caused by a fault, making a combination of both theories true. A geologic map would show any faults under Al Asad and provide a surer answer.

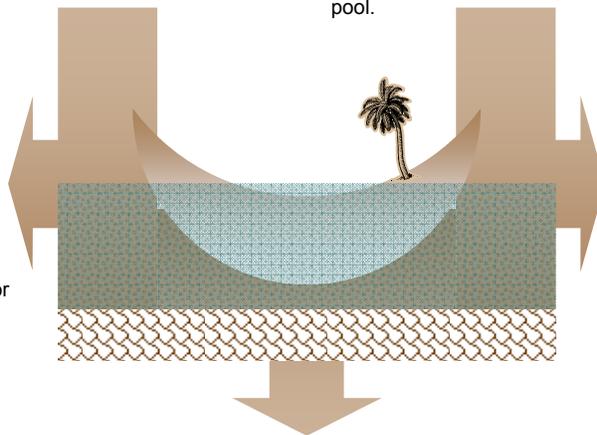
Oasis Formation

2. The movement of a fault (or usually two parallel faults) pulls the ground apart, causing the middle section to subside.

3. Where the ground sinks below the level of the water table, ground water is exposed creating a pool.

4. In the depressed valley, the depth to the water table is shallow, allowing trees to grow, which in turn attract wildlife. Palm trees in particular tend to grow where the water table is most exposed, i.e. around the pool.

1. An impermeable layer of rock fractured by tectonic movement, pushed up from below, or consisting of clay or other fine material blocks ground water from escaping, forming an underground aquifer.



Selenite (gypsum) found at TQ by CW4 Rohrbacher

The white powdery sand is most likely an indicator of gypsum, a common mineral in Iraq and component of concrete. The mining operation on post extracts sand, gravel, and probably gypsum, which is mixed into concrete near the tall towers northwest of the office

Questions from the Field—your questions answered!

What is blooming in front of the TOC building?

Oleander is a shrubby bush with clusters of bright flowers, usually pink or white. Its clear sap is highly poisonous, but only if you can stand the taste and keep from throwing up long enough to ingest a

lethal dose! Hands should be washed after handling this plant, and it should never be burned, as it produces deadly toxic smoke. It has been planted in gardens around the world, and summer visitors to Galveston, Texas, might find themselves in the middle of that city’s annual Oleander Festival!



Birders' Corner

OFFICIAL NEWSLETTER OF THE UNOFFICIAL
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Send your photos, questions, and submissions to
MAJ Rogers at:
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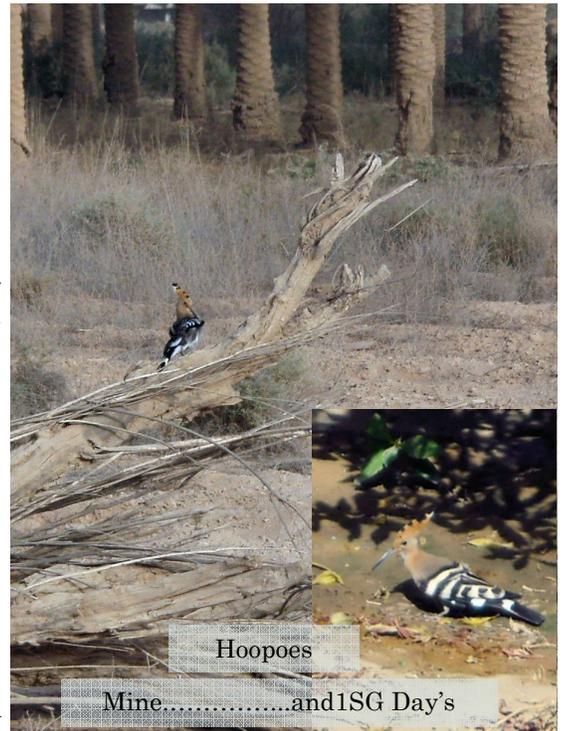
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Always Right, Sustain the Fight!

371st SB

This week I need a whole page for birds due to a fantastic morning I had on August 10th. Think the desert is all brown? Check out these birds! The morning started slow, then a striking pattern of black and white grabbed my eye—yes, it was last issue's "Pic of the Week", a **Hoopoe!** Previously I had only seen one hoopoe in Spain, and that was in flight from a moving train, so this was a bird I really wanted to see. Hoopoes are one of my favs just because I like to say their Latin name, *Upupa epops!* Hoopoes are loosely linked to rollers, but are considered unlike any other bird. A few minutes later, as I scanned a row of palms with my binoculars, a brilliant flash of electric blue whizzed



Species I've Identified on

Al Asad to Date: **22**

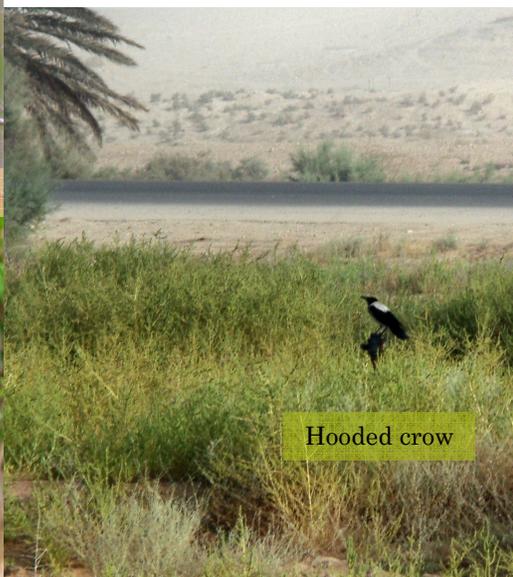


European roller



© Ray Wilson

by, announcing the arrival of the extraordinary **European roller**. Known for its in flight acrobats during its mating ritual, this 12' long blaze of color is actually hunted for food in Oman, depressing its numbers on the Arabian peninsula, but it is common through most of its European range. Rollers snack on lizards and large insects, beating them on the ground or a perch before eating them.



Hooded crow

Next was a big (nearly 19" tall) gray and black crow, the **Hooded crow**. These seem to live here only in small numbers around the palm grove. They are not a separate species, but are considered a race of the all black Carrion crow. Adding a noisy splash of emerald green to the mix, four Blue-cheeked bee-eaters



Blue-cheeked bee-eater

flew by, likely part of the same flock mentioned in the last "Birders' Corner". They squawk in flight, which is helpful since they always seem to sneak up from behind me! It was a morning full of bright colors and vivid patterns in our otherwise muted corner of the world!