



Naturalist Notes



Winter at Sheldon Lake State Park

FROM THE EDITOR

I am trying out a new format. Let me know if you either love it or hate it.

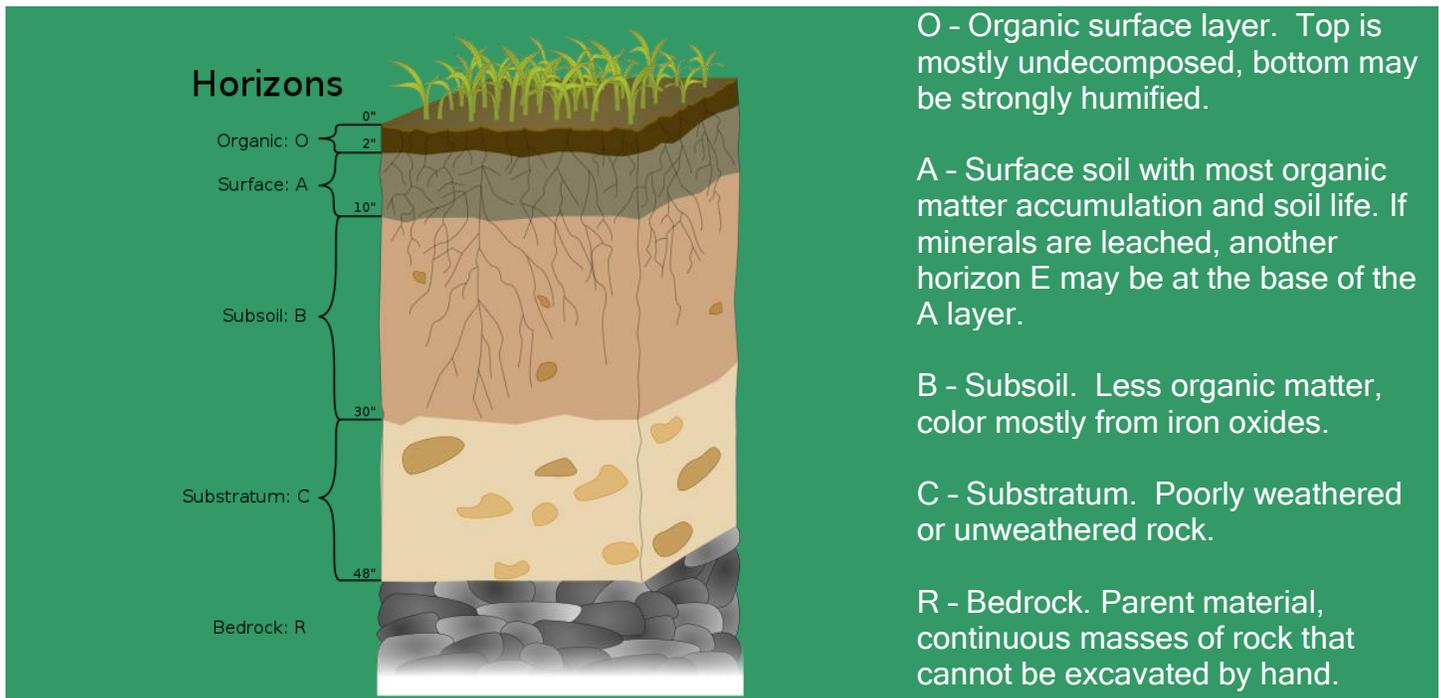
Irmi Willcockson, Editor

DUES ARE DUE

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MN MERCHANDISE

AgriLife Learn is the new name of the bookstore. <https://agrilifelearn.tamu.edu> Click on Merchandise, then search for Master Naturalist. According to TMN Tuesday, new merchandise may appear starting in February.



O - Organic surface layer. Top is mostly undecomposed, bottom may be strongly humified.

A - Surface soil with most organic matter accumulation and soil life. If minerals are leached, another horizon E may be at the base of the A layer.

B - Subsoil. Less organic matter, color mostly from iron oxides.

C - Substratum. Poorly weathered or unweathered rock.

R - Bedrock. Parent material, continuous masses of rock that cannot be excavated by hand.

SOIL OF THE MONTH - INTRODUCTION

In 2020, I wrote a series of articles on the sky, and clouds. Last year I looked more closely at the physical and chemical properties of water. This year I want to focus on the abiotic properties of soil. The primary resource will be the Texas Master Naturalist curriculum, unless otherwise specified.

Soil is defined as a natural body comprised of solids (minerals and organic matter), liquid, and gases that occurs on the land surface and occupies space. It is characterized by one or both of the following: horizons, or layers, that are distinguishable from the initial material as a result of additions, losses, transfers, and transformations of energy and matter or the ability to support rooted plants in a natural environment (Soil Taxonomy 2nd Ed). The upper limit is the boundary between soil and air, shallow water, or plants that have not begun to decompose. The lower limit is more difficult to determine. Hard rock or material almost devoid of biological activity is usually considered the lower limit. The figure above shows a generic soil profile. As the year progresses I want to look more closely at the different soils found in the greater Houston area.

ORGANISM OF THE MONTH

CRESTED CARACARA (*CARACARA CHERIWAY*)

The Crested Caracara is an extremely intelligent bird of the falcon family with a wingspan of nearly 4 feet. They have a black cap on their head, a white neck, and distinctive barring on their feathers. Their bright faces can change in color from pink, yellow, and orange. Orange red indicates a relaxed bird, while a threatened caracara may change to pale yellow. This is done by blood bypassing the subepidermal blood vessels.

Caracaras are resourceful omnivores and opportunistic diners. They will feed on carrion or their own kills, which can range from insects and fish to small reptiles and mammals. Some have even been spotted eating an alligator! Others have been seen attacking other large birds from above, striking their backs. The surprised victim drops its prey, and the caracara dives to snatch the prey before it hits the ground. They are the only falcons that collect material for building nests. It takes the pair 2 to 4 weeks to build a nest about 2 feet wide. Nesting typically happens in winter with a clutch size of 1-4 eggs. While they are currently of low conservation concern, their species is steadily declining due to habitat loss and other human interference.

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While the bulk of these diurnal birds are primarily found in Central and South America, Central and South Texans have the chance to see caracaras year-round. Look for them perched on fences, flying low in the fields, and often running on the ground in scrubby areas.

Text credit: Liberty Johse

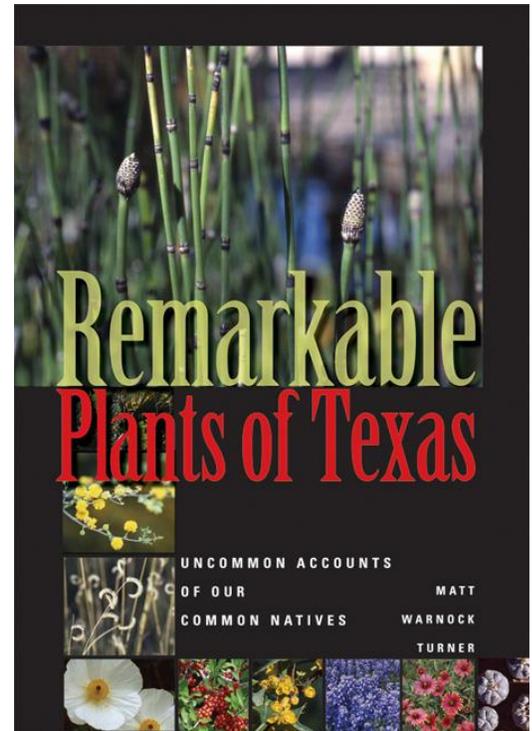
Photo credit: Joshua Vandermeulen | Macaulay Library



Book Review

The Remarkable Plants of Texas - Uncommon Accounts of our Common Natives, 2009, University of Texas Press

According to the UT Press, “Going well beyond typical field guides, this extensively illustrated book presents the remarkable natural and cultural history of eighty of Texas’s most fascinating native plants.” Although the author considers himself a naturalist, the natural history of only two of the plants featured in this book comes to the fore. Instead of the natural history of these common natives (27 trees, 13 shrubs, 32 herbaceous plants), we get a fascinating account of each of these plants, from the point of view of ethnobotany, which is the study of the traditional knowledge and customs of a people concerning plants and their medical, religious, and other uses. And very importantly, this book covers the traditional knowledge and customs of both native peoples in Texas (see map at bottom) as well as those of European settlers as far as the historical documents the author can access will allow. This opens up a whole world that most of us, because of our modern food systems and manufacturing, have had little exposure to or knowledge of.



For us as Master naturalists, ethnobotanical information about those native plants in our ecoregion can be very useful in showing people how humans in Texas have interacted with native plants in beneficial ways. It brings nature and people together and does away with the false dichotomy of us and nature and illustrates how people’s very survival depended on nature and that they were part of nature. In addition, this approach brings the native tribes of Texas to the fore so that we ourselves can get a sense of whose land we are on and be able to convey that sense to others.

The chapter on Osage Orange (*Maclura pomifera*) or *bois d’arc* (French for bow wood and pronounced bodark in English) provides extensive and interesting ethnobotanical information going back as far as a thousand years ago as well as intriguing natural history information going back even further in time on this in many ways unique species.

The plant of our 2021 Recertification Pin, Sideoats Grama (*Bouteloua curtipendula*), is nicely featured alongside and contrasted with Blue Grama (*Buteloua gracilis*).

While one can read through this book from cover to cover, that is not enough to really absorb even a fraction of what is on offer. Rather, once you are acquainted with the book by reading through it once, you can really take in what it has to offer by going back from time to time to different plants of interest. It is a treasure of a reference book.

Bob Romero