

# **Ecology of Plant Communities of South-Central Texas\***

**O. W. Van Auken**

Professor Emeritus of Biology  
The University of Texas at San Antonio, San Antonio, Texas 78249

Email: [oscar.vanauken@utsa.edu](mailto:oscar.vanauken@utsa.edu)

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Front piece. Drone aerial photograph of a juniper (*Juniperus*)/live oak (*Quercus*) woodland in the south-central part of the Edwards Plateau or Hill Country of Texas. Photograph was taken at approximately 300 m.



## Preface

My family and I first came to Texas in 1969. We came from the northern part of the United States and were glad to get away from the cold weather. We didn't realize that we traded six months of winter for six months of summer. In addition, botanically I was in a different world. It seemed that all of the woody plants that I tried to identify had leaves that were small and many had thorns or prickles. This was very different for me when all of the trees and shrubs that I knew had leaves that were about the size of my open hand or bigger. In addition to see the tops of the trees I grew up with you had to arch your back, shade your eyes and look up over 25 m (82 ft.).

My family was very helpful when I was deciding where to take students on field trips to see a large variety of both central Texas plants and animals. I thought if my wife Jane and our children Wil, Celeste and Serle could endure the walks, hikes and climbs, my students could too. Well, that thought was not correct. I also thank Jane for being so patient and tolerant of me while I worked on various projects including papers and books. I know I haven't thanked her enough, thank you again.

For the past 48 years as I traveled around central and west Texas I have had to alter my thinking about plants and plant ecology, time and time again, as I continued to learn about all of the plants that were new to me. Mostly, I would get stuck and have to ask one of my colleagues, usually Ms. Stephanie Elliott or Dr. Janis Bush "do you recognize this, have you ever seen this specimen before, or what do you think this is, or a series of vulgarities and then what do you think this is?" And, I still find species today that I have never seen before.

I was interested in the species usually the woody ones that were present in this or that area or community. The communities were usually in central Texas. But then, why were they found where they were found and what about their neighbors? After all of this time and effort, I finally know a lot of the plants, so I can study them and try to figure out why they occur where they do. I have had help and encouragement from friends, colleagues and lots of former students, too many to name. We published many papers together or presented results at local, state or national meetings.

In addition, I owe a tremendous thanks to Mr. and Mrs. Roy Gazaway, ranchers and longtime residences of the “Hill Country” of southcentral Texas. Thank you for allowing my students and me access to your beautiful ranch. The early studies almost 50 years ago opened my eyes to many possibilities to understanding the species and interactions that go into developing the plant communities of this area. I hope to return and look at the changes that have occurred more closely in the future.

After all of this time, there have been few papers or books about local plant ecology. There are taxonomic books about state flora and a few local ones, but only two ecological ones that look at plant interactions and why plants are found in particular places. I hope to rectify some of this lack of understanding with the current book by bring together papers about various species in many parts of central Texas.

Best regards,  
O. W. Van Auken

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