

What People Are Reading and Listening To

Gaia's Web

A full [review of this book](#) can be read at this link - from the 4 April 2024 issue of *Science*. An example of Bakker's study of the potentials (and pitfalls) of new technologies when it comes to the study of natural history is illustrated by her discussion of [Wildbook](#) (from [wildme.org](#)). This project utilizes a variety of machine learning algorithms to study natural history, including the identification of individual animals from images (trailcams, video feeds, etc.) - not the identification to species - the identification of the individual.

The Blind Spot - Why Science Cannot Ignore Human Experience

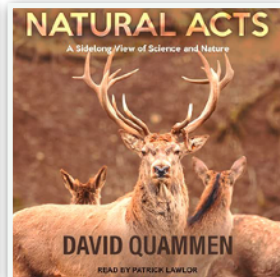
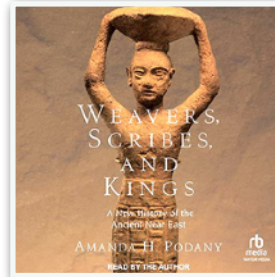
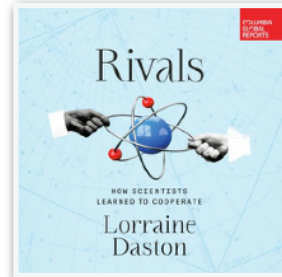
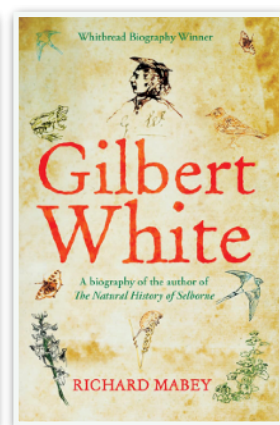
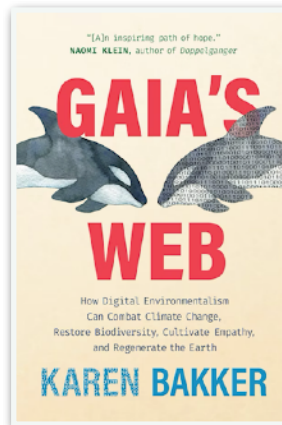
The Authors (Frank, Gleiser, and Thompson) argue for the inclusion of the human experience within the construct of science. Michael Pollan states that they "call for a revolutionary scientific worldview, where science includes – rather than ignores or tries not to see – humanity's lived experience as an inescapable part of our search for objective truth. The authors present science not as discovering an absolute reality but rather as a highly refined, constantly evolving form of human experience."

Gilbert White

Want to know what Gilbert, the famed naturalist who made in-depth studies of specific locales a thing, spent that shilling on last Thursday? This is the book for you. - R. A. Barnes

Rivals - How Scientists Learned to Cooperate

I don't buy it and would not buy it again. All too often people who are trying to make a point take an extreme position to justify the effort. For my two cents, scientists are humans and act like members of that species. Accept that fact and get on with life. - R. A. Barnes



Weavers, Scribes, and Kings

Amanda Podany has produced a work of art. She uses cuneiform inscriptions to tell the history of the ancient Near East. With an engaging sense of perspective, in-depth topical knowledge, and a deep sense of history she weaves a story which is engaging (sometimes repetitive - history often is) and enlightening.

Natural Acts

This is a 2009 revision of a book which first appeared in 1985. After 15 years some of the information is a bit dated but Quammen is an excellent essayist and this collection of short reads is easy to pick up and start at any point in the book. A nice turn of phrase greets you on every page and a global perspective often leaves the reader wondering as much as the author.

Journeys of a Pure Naturalist

When I started this book I had as a goal the understanding of what a "pure naturalist" was. By the end I was affirmed in an understanding of a lifestyle I am very familiar with and impressed with Joe "JB" Billings' ability and motivation to explore the natural history of Arizona, Sonora, Baja California, and Baja California Sur on his own terms.

Billings is described on his website in these words: "A lifelong, naturalist-at-large and 21st century cave man – has extensively explored, studied, written about, and photographed the wildlands of SE Arizona, along with other areas of the west and Mexico. Whether on an all-day long bushwhack hike and botanical expedition in the remotest corner of the Santa Catalina Mountains, rowing a primitive watercraft made from reeds out into the Sea of Cortez, fashioning stone spearpoints and primitive weaponry, as a self-taught flintknapper, or stalking and tagging thousands of beautiful monarch butterflies as MonarchQuestAZ, he is equally at home in the outdoors, all year-round . . . JB tagged over 6,000 butterflies during six field seasons as MonarchQuestAZ, while tracking down at least 100 tagged monarchs from all tagging programs along the California coast and in the Mexican monarch preserves, including a dozen of his own tags . . ."

Truth be told, this self-description covers the topical subjects of his book fairly well because it describes his life, his ramblings, his insights, as a "pure naturalist". My understanding of what he means by that term began early in the reading of the book and continued to be reinforced and augmented as I read along. Billings might take issue with my description, but I would say that by a "pure naturalist"

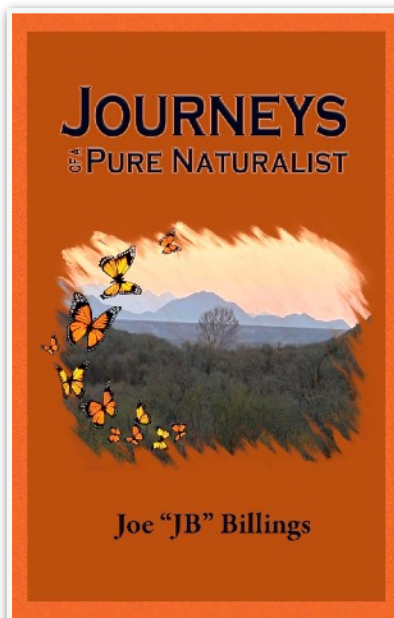
he means that he is one who ventures into the natural world without a pack full of gizmos. He seeks not just to know the world he travels through, but to understand it.

Billings describes a life many of us can relate to, and have cherished, but never committed to the page. The fact that someone has put that way of knowing nature to the page benefits all of us.

His explorations of the (mostly) dry areas of the southwestern U. S. and northwestern Mexico were sometimes trying but never diminishing. Billings took on every challenge with an attitude of "I can make this work".

The book begins with several chapters describing his rambles in southeastern Arizona. Multi-day walks into some of the most challenging topography the area has to offer. Most of these treks were in the 1970s and 1980s. Consider them "period pieces", the "what we did and the way we did it back in the day". Many of us started our explorations of the natural world on a shoestring but lost that way of understanding our natural setting somewhere along the way. J. B. never did. And we should make no excuses for ourselves. After all, those aging muscles and bones can get sore after a night on the ground, but those early days of sleeping on a tarp in a wash gave us an insight that an RV will never deliver.

Billings used (uses) the same "personal touch" when it came to understanding the ways of the indigenous peoples. His chapters on



flint napping, the making of a compound atlatl, and the construction of a reed boat to travel the Sea of Cortez are about a visceral understanding of the world. Not one to be gained from reading the print on this page, or any other. His efforts are about research and time, but mostly about time, because it is knowing the time that it takes to make these things which is important. I do not wish to diminish his efforts to search out the materials those peoples used but rather to emphasize the understanding and appreciation of the sophistication of their efforts which he gained in the process.

He ends the book with a description of his work on everything from Long-tailed Tadpole Shrimp and Fairy Shrimp to the various butterfly survey and tagging efforts he has engaged in*.

Journeys of a Pure Naturalist is a book about a way of life, a way of experiencing and understanding the world. We come to understand Billings' use of the term "pure" through his experiences.

This book is available on the Amazon website, [in print at this link](#), or as a [Kindle edition at this one](#).

*"Opening a Window on Southwestern Monarchs: Fall Migrant Monarch Butterflies, *Danaus plexippus* (L), Tagged Synchronously in Southwestern Arizona Migrate to

Overwintering Regions in Either Southern California or Central Mexico", Joe Billings, *Journal of the Lepidopterists' Society*, Volume 73, Number 4, pp. 257-267, 2019.

Monarchs

Migrations seem to fascinate people. In the world of the *Lepidoptera* it is the migration of the Monarch which has proven to be most interesting to the North American public.

As we learn more about the migration patterns of Monarchs our fascination seems to grow. See, for example, pp 114-118 of [Volume 5, Number 2](#), of this journal, [Butterflies and Moths of the Black Range and Doña Ana County](#) (a publication of the Black Range Website).

Research into their migration patterns (for example, J. Billings in the previous book review and David James & Linda Kappen, Feb. 2021, "[Further Insights on the Migration Biology of Monarch Butterflies, *Danaus plexippus* \(Lepidoptera: Nymphalidae\) from the Pacific Northwest](#)", *Insects*. 12. 161. 10.3390/insects12020161) has added layers of complexity to the understanding of their multi-year, multi-generational migration patterns. It is now clear that the east coast and west coast populations migrate differently and to two different winter population centers. It has also become clear, through the work of Billings, Silver City school kids, and others, that individuals in the population found in the southwestern United States may migrate to either the middle and southern coastal reaches of California OR to the Mexican highlands. Additional research is needed to clarify the whys, wheres, and whens of this phenomenon.

Saying that additional research is needed is one thing. To understand the hands-on manner in which such research is conducted I refer you to Joe Billings' book - *The Journeys of a Pure Naturalist*. (Here is a hint: when your response to a swarm of caterpillars is to open your house to them so that their metamorphosis can be studied more closely, you are deeply into the research mindset.)