

Yellowstone Wildlife: Ecology and Natural History of the Greater Yellowstone Ecosystem

By Paul A. Johnsgard. 2013. University of Colorado Press, 5589 Arapahoe Avenue, Suite 206C, Boulder, Colorado 80303 USA. 248 pages, 31.29 USD, Paper.

Paul Johnsgard is a lifetime naturalist who has published numerous works on taxonomy, natural history, and ecology in the American West especially the Great Plains and the state of Nebraska. His long publication list is filled with natural history monographs of birds of the Rocky Mountains and Great Plains can be found on the University of Nebraska, Lincoln website Digital Commons. His last book on the Wyoming mountain area was published in 1982 entitled *Teton Wildlife:*

Observations by a Naturalist, and focussed on different bird species of the area.

The above work, in collaboration with his former student and wildlife photographer Thomas Mangelsen, is a coffee-table sized, soft-cover book of 224 pages with many full and double paged photographs spectacular in their beauty and grand perspective. Landscapes and natural areas as well as birds and mammals in their natural landscapes are featured in Mangelsen's photog-

raphy and many sidebar drawings by Johnsgard himself are included. A quick count rendered 46 photographs and 26 drawings which fill up the book and provide relief in the large pages of text on natural history in the area.

The area featured is the first confusing aspect of the book. The Greater Yellowstone Ecosystem is not only Yellowstone National Park, a name well-known and recognized by tourists and almost all readers, but includes much more regional geography. Chapters are named by their landform areas but only four of the fourteen chapters are located in or near the park and the other ten chapters are located far to the south in regions named Jackson Hole, Grand Teton Park, the National Elk Refuge, and the Bridger Teton National Forest. To the north and east there are Montana and Wyoming cattle ranching areas outside of the parks. A couple of small maps at the beginning of the book locates the chapters in their relative areas but there is no large map to orient the unfamiliar reader with the whole area. The visitor who has had one or two experiences of visiting Yellowstone will quickly realize that these are not areas remembered from driving the ring roads of neither Yellowstone nor day-hiking nearby trails.

The strength of the book is the extensive research which Johnsgard has accumulated on population and conservation data of many of the large mammal species of elk, bison, deer and wolves. Years of population studies on timber wolves as they rose and fell coinciding

with the health of the elk population and comments on current herd and wolf pack management are included along with comments on population control decisions. Johnsgard is in favour of annual culls to keep the populations healthy and allowing wolf packs to contribute to the population control. Natural history patterns of other mammals are also included with life history accounts of beaver, bear, bighorn sheep and various smaller mammals. His life history stories of the various animals makes interesting reading for the naturalist who has encountered these species at Yellowstone or in other natural habitats.

The birds of course are Johnsgard's strength and most of his life's work. The book includes many accounts of bird-life written in a story-book fashion following an individual or mating pair forming pairs, nesting-building, and home range defence. Lists of resident birds, mammals, amphibians, reptiles, and fish are all included to complete the vertebrate counts.

I spent many hours reading the text and leafing back and forth through the book to view and revisit the photographs comparing the mammals and birds featured with the appendices giving more research details. It is an attractive book to read in short life-story passages by a masterful story-teller or look at brilliant pictures by an accomplished photographer. As a good story will do, I enjoyed my time with it and thought of more touring in the Yellowstone Plateau region.

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