

habit, details of the inflorescence and/or achenes, a statement on the status of the species in Indiana, and any other remarks that the author felt were helpful in identifying or in understanding the distribution or ecology of the species in the state. In general, I found the information provided in the species treatments to be relevant and interesting.

Most aspects of the production, content, and appearance of this book are attractive, informative, and accessible to the non-expert and expert alike. The author's writing style is entertaining at times, in addition to being authoritative. The most disconcerting aspect of the book is the relatively frequent occurrence of grammatical errors, reflecting poor copy editing. Nevertheless, overall, this book provides a very good summary of the state of knowledge of the identification, distribution,

status, and ecology of the non-*Carex* sedges of Indiana, and I recommend it to botanists and field biologists in the American Midwest. It contains information that will be useful beyond this geographic range as well.

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ENVIRONMENT

Ecology of Fragmented Landscapes

By Sharon K. Collinge. 2009. Johns Hopkins University Press, 2715 North Charles Street Baltimore, Maryland 21218-4363 USA. 340 pages, 70 USD Cloth.

Ecology of Fragmented Landscapes is an intriguing look at a growing and increasingly problematic phenomenon: fractured lands that significantly affect biodiversity. Ecologist and evolutionary biologist Sharon Collinge synthesizes decades of research on fragmented landscapes into 12 chapters discussing topics such as fragment size and isolation, animal and plant movement, species interaction, parasites and disease, restoration, and ecological planning. The main purpose of the book is to summarize current knowledge related to fragmented landscapes.

The "Animal and Plant Movement" chapter is particularly interesting. Collinge starts by discussing differing types of animal and plant movement, then points out that in fragmented landscapes species often encounter obstacles in their attempts to travel from one suitable habitat patch to another. She goes on to discuss the highly debated effectiveness of corridors, which have their advantages and disadvantages, and which work for some species and certain situations, but not all—not for the species that "appear to move across landscapes in mysterious and unexplained ways" (page 131), some of which benefit more from stepping stones of habitat patches than from linear corridors.

Collinge stresses that we need to learn more about the conditions in which corridors can be expected to facilitate movement. She points out that it is also essential to better understand movement, along with the ways in which a species' perception and capacity for movement are integrated with landscape patterns.

It is also important to understand interactions in landscapes, as discussed in the "Species Interactions"

chapter. Collinge writes about competition, predation, pollination, seed dispersal, mycorrhizal associations, and herbivory and seed predation—as well as a fascinating and little-studied phenomenon known as "floral larceny" (page 162)—in various negative and positive configurations. She ends the chapter by stressing that many questions remain unanswered, questions that are important in planning and managing landscapes that support rich biodiversity.

In the "Restoration" chapter, Collinge presents a variety of fascinating case studies involving both human and natural landscape restoration. The "Ecological Planning" chapter discusses a wide range of activities and approaches that have as a common denominator the integration of ecological knowledge with deliberate human action and landscape change, from greenways and new urbanism to systematic conservation planning and initiatives such as the Living Landscapes Program and the Wildlands Project.

Collinge leaves us with final thoughts on key concepts and promising research directions. Stressing that many opportunities exist to incorporate current knowledge about fragmented landscapes into actions that will "stem the tide of biodiversity losses and the degradation of ecosystem services" (page 279), she encourages readers to develop creative solutions that will meet landowner and stakeholder needs for information and incentives to make positive landscape change.

Ecology of Fragmented Landscapes is a fascinating, thorough, and positive book, packed with scientific and technical content—an excellent resource for teachers and students of landscape and restoration ecology

or for scientifically oriented naturalists. The content may, however, be a little dense for naturalists who are not used to scientific and academic writing and who are looking for an informative, enjoyable, and relatively uncomplicated read. That said, those readers willing

to wade into the material and make the effort to understand it will find the endeavour well worthwhile and will learn a great deal.

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MISCELLANEOUS

Innocents in the Dry Valleys: An Account of the Victoria University of Wellington Antarctic Expedition, 1958-59

By Colin Bull. 2009. University of Alaska Press, 794 University Avenue, Suite 220, Fairbanks, Alaska 99709 USA. 267 pages, 25 USD Paper.

One of the most remarkable and puzzling Antarctic finds by the *Discovery* expedition was the existence of an inland ice-free valley on the west side of McMurdo Sound. When Robert Scott, William Lashly, and Edgar Evans slogged into the valley in December 1903, it impressed them as “a very wonderful place.” It also impressed them by its apparent lifelessness, no doubt reinforced when they also found the mummified remains of a Weddell seal. Scott famously described the valley in his diary as “a valley of death”. However, this ice-free terrain, offering good rock exposures, was a magnet to the geologists on Scott’s second expedition. In 1911, Griffith Taylor, after whom the valley is named, with Charles (“Silas”) Wright, Edgar Evans, and Frank Debenham, spent several days there examining the geology.

Skip forward to the late 1940s, when aerial photography revealed the existence of two more large “dry valleys,” now called Wright Valley and Victoria Valley, in the same area. In the austral summer of 1957-1958, Colin Bull tells us, two geology undergrads from Victoria University of Wellington in New Zealand, Barrie McKelvey and Peter Webb, managed to finagle their way onto the team re-supplying New Zealand’s Scott Base in Antarctica. Together with Dick Barwick, a junior lecturer in biology at Victoria University of Wellington, Barrie worked in Victoria Valley, until then unexplored. McKelvey and Webb also spent time mapping sandstones and dolerites in Beacon Valley, a tributary of Taylor Valley. Back in New Zealand, they talked enthusiastically about their summer field experience. By coincidence, Colin Bull, then a newly hired physics lecturer fresh from the UK, heard one of their talks. Bull already had several years’ field experience in the Arctic carrying out geophysical surveys. He was thinking about trying to initiate fieldwork in Antarctica, having been intrigued by the air photos of the McMurdo Dry Valleys shown to him by Vivian Fuchs during a visit to Cambridge. Bull’s target was Wright Valley, located between Victoria and Taylor valleys and so far unexplored. Immediately, he recruited McKelvey, Webb, and Barwick onto his team. They spent several months scrounging up funds and

field supplies, notably by persuading various manufacturers and food suppliers to donate their products, while Bull negotiated the delicate official hurdles to get them to Antarctica. Eventually, the entire expedition was accomplished on a shoestring budget of about \$1,000.

Bull provides a lively and engaging account of their subsequent two-month field season in Wright Valley, with studies encompassing geophysics, geology, and biology. The valley provided plenty of scope for their fieldwork. Stretching inland for about 60 km, the valley is bounded by steep slopes of the Asgard and Olympus ranges. Cliffs are cut in sandstones topped with dolerite, while lower slopes are cut in granites, and igneous dykes protrude along the valley floor. The valley terminates in glaciers at both ends, with moraines providing additional evidence of earlier glacial episodes, while many smaller glaciers spill down side slopes. A large enigmatic ice-covered lake, which they named Lake Vanda, lies toward the west end of the valley and is fed by the Onyx River.

“It really was the most exciting view in all directions, the huge sandstone cliffs, the monstrous icefalls, everything!” exclaims Bull. “How can I tell you easily how excited we all were?” (page 75).

Given the size of the field area and their limited time, they were able to do only preliminary reconnaissance studies. Bull and Barwick did topographic mapping and survey work. Bull carried out a gravity survey to investigate subsurface structure and collected oriented rock samples for palaeomagnetic studies to provide evidence of polar wandering. McKelvey and Webb mapped and characterized the bedrock geology and collected rock samples for their MSc theses. Barwick hunted for life forms, terrestrial and aquatic. They also set up a Stevenson screen and recorded weather observations. All their data were interesting and significant because so little was known about this area.

Beyond the purely scientific objectives, this was a great adventure. Bull describes the vicissitudes of camp life and fieldwork, challenges exacerbated by the remoteness of their field area, which also lent a distinct edge and more than a touch of danger to their



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