

Review: Cottonwood and the River of Time: On Trees, Evolution, and Society

By Reinhard F. Stettler

Reviewed by Ryder W. Miller

Stettler, Reinhard F. *Cottonwood and the River Of Time: On Trees, Evolution, and Society*. Seattle, WA: University of Washington Press, 2009. 301pp. ISBN 9780295988801. US\$24.95,paper. Alkaline paper.

Fascinating exploration here of the natural history of, and our relationship with, trees in general, and poplars and black cottonwood (a riparian tree) in particular. This exploration is dense with facts, descriptions, and experiments, and is based on many recent scientific discoveries. The book, though a thought provoking read, however is not an introductory text book about the black cottonwoods, poplars or trees. One needs to have at least the rudiments of a natural history background to understand some of the intricate details. The book should fascinate and inspire botanists and natural historians.

Reinhard F. Stettler, of the University of Washington, takes on the larger questions of our relationships with trees. He does not shy away from offering utilitarian positions. Not too strange to find in this context is a reference to restoration ecology (p.150) which is referred to as a "lost cause." Despite being in favor of tree plantations, Stettler does not argue that it is possible to recreate an approximation of what once existed so the original wildlife can return or be re-introduced. The argument that we have irrevocably lost the "pristine" does not fully inspire here to save the remaining pieces, though altered, of what we have left. The trees can provide the foundation to recreate to some extent habitats that have been supplanted by forestry.

We are all in it together with the wildlife, Stettler writes like many others: "People are part of this valley, too, and have an allegiance to its green landscape, its forested hills, and the permanent backdrop of the rocky ramparts of the Cascade Range" (p.225). This is a commonplace argument which fails to recognize that technological culture should be contrasted with wilderness with the hope of preserving untrammelled places. Though not an argument for such, Stetter also appreciates what can be learned from the wild places also, but things have changed.

What makes this book stand out is its exploration of arboreal genetics. Stettler goes inside, to the very genetics of trees, to better understand them. Stettler has kept up with the modern genetic developments of the last twenty years, describing what has been learned about poplars, one of the organisms genetically transcribed by the Genome Project.

Cottonwood would serve a useful function for mid level or upper level students in forestry, terrestrial plant ecology, and evolution. It presents a broader scope than one would expect. The glossary included is helpful, but a few basic words are missing. This book could also offer itself as a challenge for the general reader looking for a treatise in botany and plant genetics, ecology, and evolution. The work presents the context in which trees should be understood, and requires a close and slow reading. The presentation at times is convoluted, but at times the prose flows like water down a river. The work also will impress the reader who has focused on the subject.

The book succeeds at being both descriptive and exploratory. The questions and theories explored are intriguing. One will gain valuable insights about our arboreal neighbors, and will not be stepping into the same northwest forest again. There are also many unanswered questions posed for the students of botany and forestry. This hybrid of a book, both forestry and genetics, also has nice pictures.

Ryder W. Miller <dolphin1965@hotmail.com>, Freelance environmental and science reporter who has been published in Sierra Magazine, California Coast & Ocean, California Wild, and Hydrosphere.