

From the State of California, Resources Agency, Department of Fish and Game

The Atlas of the Biodiversity of California

California's biodiversity stretches across an incredible variety of ecotypes and encompasses many rare and endemic species. An engaging new atlas from the State of California, Resources Agency, Department of Fish and Game, summarizes the best available information on statewide biodiversity and regional habitats. The *Atlas of the Biodiversity of California* has been designed as an educational and informational tool and will appeal to anyone with an interest in California's singularly diverse environment. The analysis, well presented in maps, shows the richness, rarity, and endemism of species, vegetation types, and habitats.

A subject expert authored each section of the *Atlas of the Biodiversity of California*, but the language throughout is consistent and at an appropriate level of understanding for students and others interested in the subject. Each section has at least one map made using ESRI GIS software. The mapping is analytical and won a Poster Session award at the 2002 ESRI User Conference for best use of cartography in publication.

After a brief definition of biodiversity, a chapter on the analytical maps delineates the measures and data sources used for each type. An introduction to California's geography and biodiversity sets the tone for the rest of the volume. Next, a number of units comprise "Measures of Biodiversity: Richness, Rarity, and Endemism." Two-page units show the statewide status of major taxonomic groups such as vegetation types, special status plants, amphibians, reptiles, mammals, and birds.

Following the statewide information are illustrative case studies in "Samples of Biodiversity: Habitats and Species From Throughout California." Organized by region, this section presents the distribution of specific habitats or species across various regions of the state. Readers will enjoy glimpses into the worlds of kelp forests, coast redwoods, trout, Central Valley vernal pools, and desert pupfish. A short section, "Pressures on Biodiversity," shows examples of the invasive weeds and human impacts with which native species have to contend.

Lastly, the section "Sustaining Biodiversity" shows efforts by the Department of Fish and Game to guard and nurture the rich environment of California. Projects include the maintenance of Department of Fish and Game lands, regional conservation planning, joint ventures, and

Coastal Fisheries Restoration Grants. A glossary of biological, geographical, and management terms and an excellent index add to the volume's value as a teaching tool.

As well as providing good technical information, the *Atlas of the Biodiversity of California* is thoughtfully designed and attractive. Photographs, many by amateurs, illustrate each unit. The work of well-known wildlife artist Dugald Stermer graces the cover, title page, and section dividers.

As Ann Johnson, ESRI education program manager, observes, "This atlas combines art and science in a way that is pleasing and informative to both fields. The visualization of data makes this book one that educators, students in biology and earth science, and the general public will want to own and use. The

California Department of Fish and Game should be commended for the dedication to excellence that this work represents and should be assured that it will not be just a book for the few but a required text for anyone interested in biodiversity and the environment."

The atlas is available for \$20 (U.S.), which includes shipping and handling, from the California Department of General Services Publication Unit. Purchases must be by check or money order. More information, an order form, and the mailing address are posted on atlas.dfg.ca.gov/purchase.htm on the Web.

A lesson plan, including data from the data sets used in the atlas, is available on the ESRI ArcLessons Web site (gis.esri.com/industries/education/arcllessons/arcllessons.cfm).

