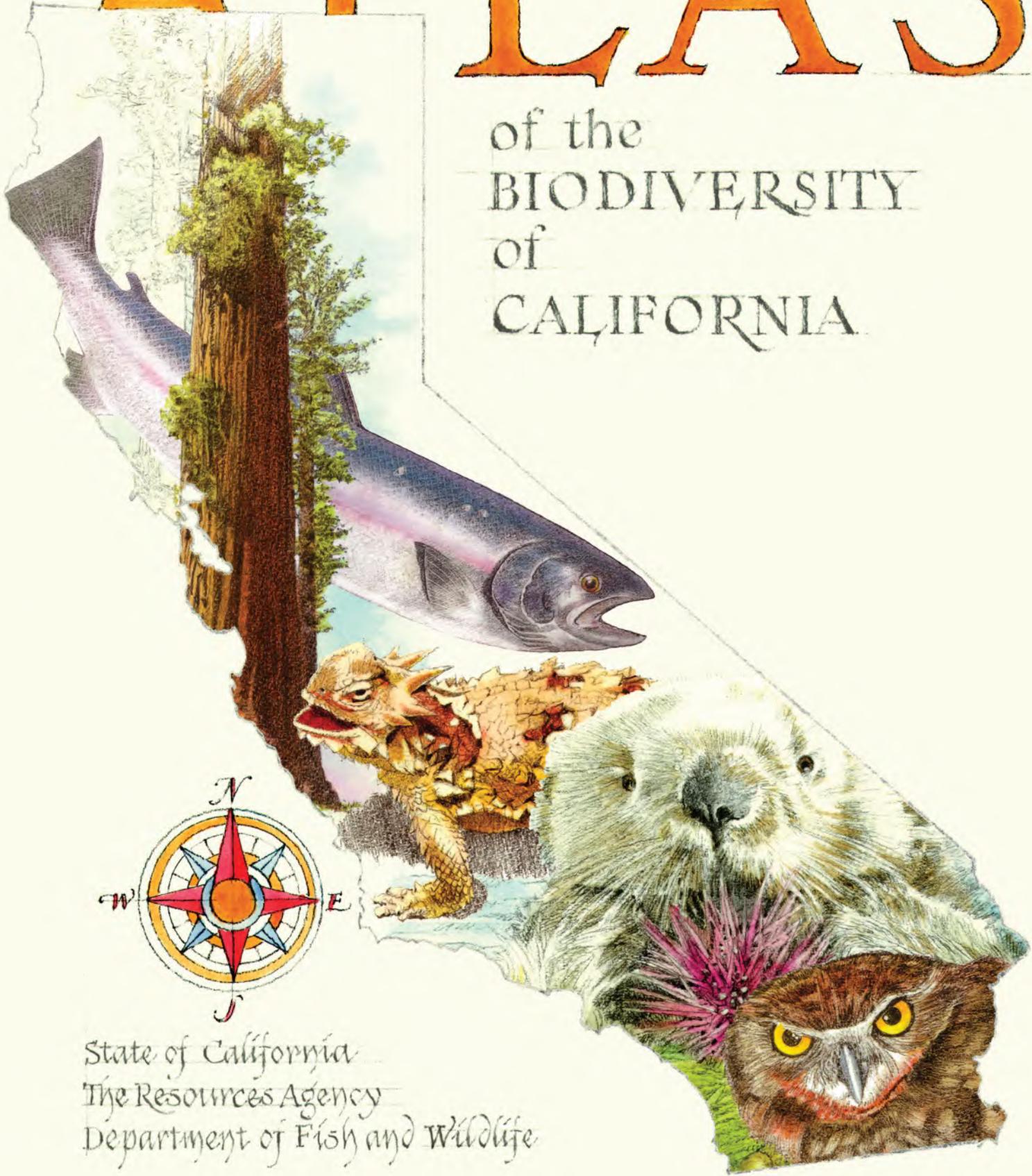


SECOND EDITION

ATLAS

of the
BIODIVERSITY
of
CALIFORNIA



State of California
The Resources Agency
Department of Fish and Wildlife

Atlas of the Biodiversity of California

State of California
The Natural Resources Agency
Department of Fish and Wildlife



CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

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Message from the Director

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The Department of Fish and Wildlife is proud to present this second edition of the Atlas of the Biodiversity of California, featuring updated maps that reflect changes to our understanding of the natural world and the impacts humans are having upon it.

A map is a slice of distilled wisdom, and each tells part of a larger story. This atlas is meant to point toward truths, to whet an appetite for learning, and to inspire the people of California to preserve our biodiversity for posterity.

The California of today was built over millions of years. It was shaped by collisions of land masses, shifts in climate, and the adaptations of organisms across geologic time. From the misty glades of redwood forests to fleeting explosions of desert wildflowers, from alpine waterfalls to the gentle meanderings of the Delta—the natural landscape of California has many different faces. This land has never remained still. Mountains move at barely perceptible speeds. Species are ever evolving and migrating. Humans are relative newcomers, yet virtually all of California’s habitats have been impacted by human activity. Now human influence has dramatically altered the pace of environmental change.

We humans, at once both wise and foolish, find ourselves bearing a staggering responsibility. We must learn while making mistakes. Future generations will inherit our role as the stewards of this earth. Let’s make sure we pass along a world that still makes a child’s eyes grow wide with wonder.

When times look dire, if you start to feel all is lost, simply stop. Broaden your gaze. Lay your hands on the soil. Listen. This world is buzzing with beauty. California’s future is contingent on how we collectively understand, engage with, feel about, and care for this great natural world described in the second edition of the atlas. May it help you and all of us on our journey.



Charlton H. Bonham

Director, California Department of Fish and Wildlife



Acknowledgments

We gratefully acknowledge the many individuals who helped make this second edition of the Atlas of the Biodiversity of California a reality. Governor Edmund G. Brown provided the impetus to undertake this update by launching the Biodiversity Initiative in the fall of 2018. Drawing from this inspiration, staff of the California Department of Fish and Wildlife began to assemble the maps and stories that make up this atlas. We thank the authors and mappers, all experts in their fields, for the time and care they extended to this project. We are additionally grateful to the many researchers who shared their data models with us and to all the persons who regularly contribute their observations of rare plants and animals to the California Natural Diversity Database. Without these contributions the richness maps would not have been possible. Staff of the California Department of Fish and Wildlife, California Department of Conservation, and others listed below present this atlas in hope of inspiring Californians to take action to conserve the state's extraordinary biodiversity.

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In Memoriam



1936 – 2011

Dugald Stermer, a native Californian who graduated with an art degree from UCLA, worked in advertising before accepting the position as Art Director for the politically influential Ramparts Magazine (1964–1970). His illustrations and designs have appeared in numerous books, magazines, and posters, covering topics from political commentary to rare plants and animals to the design of the 1984 Olympic Medals. In 1986, when asked by then Judge William Newsom, Dugald produced illustrations for the Mountain Lion Foundation that helped to secure the lion's protection in California. A distinguished professor at the California College of the Arts for over 20 years, he became the Chair of the Illustration Department in 1994. He was commissioned by the U.S. State Department to design and illustrate their 2009 Earth Day Poster. Among his many endeavors "to change the world for the better," he counseled substance abusers and ex-convicts for

over 30 years at the San Francisco based Delancey Street Foundation (where he also had his office). Dugald is the author of four books: *Vanishing Creatures*, *Vanishing Flora*, *Birds & Bees*, and *The Art of Revolution*. He was also nationally known for having the largest collection of left-handed vintage Martin guitars and for his collection of Tom Mix memorabilia.

- Chris Stermer, Wildlife Biologist, California Department of Fish and Wildlife

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