

Introduction to the special native plant issue

This very special issue of *California Fish and Game* is the first to be dedicated exclusively to California's special plants and spectacular flora. It is an historic volume, suited to celebrate the 100th anniversary of a journal that, like the Fish and Game Commission and the California Department of Fish and Wildlife, have long embraced a commitment to understanding and conserving California's plants and plant communities. Indeed, the very first issue of this journal featured an essay by former Governor George C. Pardee clearly explaining that:

“Everybody therefore, who believes — as almost everybody does — in the conservation of fish and game must, if he takes a second thought, believe just as thoroughly in the conservation ...of our forests and our waters. The fish and game conservationist therefore must be a forest and water and waste places conservationist, whether they be publicly or privately owned. For it is just as much an injury to the public, including the hunter, if our forests be destroyed no matter whether they be publicly or privately owned.”

A century ago, when this journal published its first issue, California was a very different place. In 1914, automobiles were still something of a novelty and California was still largely wild. Though American and European botanists had already learned much about California, in 1914 much of the state's botany remained a mystery. In many ways it was a key period in California biology and botany: Jepson was working on his *Flora*, legendary botanists were describing new species by the score, and *California Fish and Game* was initiated as a scientific journal to capture and share the exciting discoveries that were being made every day.

Today we live in a very different California. Our land today contains about 35 million more humans than it did century ago, including thousands of dedicated scientists and conservation professionals. In the intervening years we have learned much about our flora, and today we are particularly privileged to live during a renewed renaissance of discovery.

In recent decades, we have developed powerful tools for deciphering and analyzing the genetic composition of California plants, providing an unparalleled understanding of evolutionary relationships. As a result we are discovering hundreds of new species; in some cases we are finding that plants formerly considered to be a single species are not even close relatives! Simultaneously, we are experiencing a computer-driven revolution in data sharing and visualization; we are able to generate and share powerful maps that combine information unimagined in 1914, and apply powerful software to assessing conservation needs and prioritizing solutions. As these inspiring discoveries teach us more about the remarkable state we call home, they also further increase our commitment to conserving this legacy for future generations. As we learn more about why California is special, not just for us but for the whole planet, we strengthen our pledge to dedicate our minds, our hands and our hearts to conserving it.

How will California change in the next 100 years? We expect that it will be a lot warmer, and sea levels are likely to be higher. In all likelihood we will have discovered hundreds of new plant species. Though, because our state already has both the highest amount of biodiversity and also ranks highest in loss of biodiversity, we will very likely have lost many species, too. We can expect to see the beginning of population stabilization, though total human population will likely reach 50 million before it shows signs of declining. It is also very likely that our science and our profound commitment to saving this place will have given us powerful new tools for conservation. What is not certain is whether these tools will be sufficient to make a big enough difference, soon enough. Will California still have the spring wild flower displays that feed specialized pollinators and attract photographers from throughout the world? Will we succeed in saving Joshua trees, the wild desert, the delicate and sensitive alpine flower fields, and all of the other very special and very fragile parts that make our home so special? We cannot predict with certainty what the answers will be, but the good news is that we have a proven track record of conservation, we have incredibly powerful tools to employ, and thousands of acres of protected areas, all to help us conserve our state's unparalleled biodiversity.

When viewed as a whole, the papers that have been included in this special issue tell the story of a special community of people who strive to understand, celebrate, and conserve California's plants. We hope you will enjoy their good work, appreciate their dedication, and join their effort to preserve a unique and special land.

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