Helping to solve global problems through local work at Jasper Ridge

1. **Anthropocene Biodiversity**
   Focuses on discovering first principles of how Earth’s ecosystems are transforming under today’s unusually rapid global change.

2. **Science for Regional Land Stewardship**
   Enhances the scientific underpinning needed to effectively steward Stanford lands and the San Francisco Bay area’s ecological health.

3. **Out of the Box and Into the Cloud**
   Capitalizes on Jasper Ridge’s leadership in field technology to provide a nexus for local to global collaborations.

The Anthropocene is a new epoch in Earth’s history characterized by people actively reshaping all of Earth’s systems at lightning speed. How nature is transforming under these unusual conditions has emerged as the issue of our time. Related questions permeate scientific studies and societal decisions in ways that range from dealing with climate change to alleviating poverty and providing such basics as life, breathable air and drinkable water. Nature’s transformation is taking place before our eyes because people—themselves a component of biodiversity—are nowadays actively (though often inadvertently) shaping the future of all other organisms on the planet. Jasper Ridge Biological Preserve is the perfect natural laboratory in which to provide hands-on field experiences for students and researchers aimed at revealing not only the processes that underpin this transformation of life on Earth, but also how best to maintain the biodiversity processes and societal actions that will maximize environmental health and human well-being as we head into an uncertain future.

Jasper Ridge is well positioned to become an incubator of discovery and knowledge transfer that will benefit ecological stewardship of Stanford and the entire Bay area community. At the same time this initiative will connect students with practitioners to increase impact and to facilitate career opportunities. In effect, Jasper Ridge will function as a central brain trust contributing primary science to stewardship groups on campus and throughout our region.

Many of the research and educational challenges that field stations face, such as climate change, invasive species, and diminishing appreciation for nature, require collaborations that extend far beyond individual field station boundaries. Jasper Ridge Biological Preserve, already a leader in field-research technology, is uniquely positioned to foster these collaborations given its location in Stanford’s campus and within Silicon Valley. This initiative will facilitate field-based exchanges of Stanford students with counterparts living and working in the developing world, necessary to promote the cross-cultural communication that is essential for solving global and local problems. Participants from both developed and developing countries will learn from each other—both scientifically and culturally—in immersive field-related settings, recognized to be one of the most effective and influential learning environments.

Jasper Ridge will still be infinitely valuable in 100 years… when virtually every other laboratory now at Stanford will be passé and will have disappeared.

— Paul Ehrlich

**Jasper Ridge Biological Preserve Strategic Plan**

At the heart of the strategic plan are three initiatives that inter-relate to provide new local, regional, and global opportunities for students and faculty.

Together, the three initiatives will engage sectors of campus that have not traditionally used Jasper Ridge and enable interdisciplinary and cross-cultural training and research to enhance stewardship of Planet Earth.
The Path to Success

The Jasper Ridge strategic plan dovetails with key aspects of Stanford's Long-Range Planning Process and embraces the university's founding goals: “promoting the public welfare by exercising an influence in behalf of humanity and civilization” and “qualifying students for personal success, and direct usefulness in life.” The plan is ambitious but feasible, with some benchmarks already achieved and others underway.

Guiding Principles of the Strategic Plan

- Enhancing Stanford University through improvements in key areas highlighted in the university’s Long-Range Planning Process.
- Building on Jasper Ridge Biological Preserve’s widely acknowledged legacy and remarkable strengths.
  - World-class research that has changed the ways biologists think
  - Award-winning courses
  - Leslie Shao-ming Sun Field Station
  - Leading-edge field-station technology
  - Diverse ecological and cultural setting
  - Proximity to central campus and Silicon Valley
  - Stanford’s core terrestrial nature preserve surrounded by buffer lands
  - Talented and dedicated staff
  - Strong outreach program
  - Committed volunteers
  - Supportive surrounding communities
  - Collaborations with a multitude of programs both within and outside Stanford
  - Dedicated endowments and university support that make existing programs possible
- Recognizing that unusually rapid global change is transforming all of the world’s ecosystems, with increasing threats to the preserve from external influences acting globally as well as right outside its boundaries, including climate change, wildfires, invasive species, extinctions, pollution, and intensified urbanization.
- Anticipating that major changes to Searsville Dam and Reservoir are inevitably on the horizon in accordance with stakeholder recommendations.
- Acknowledging that the infrastructure for maintaining the preserve is in critical need of renovation, and the necessity of adequate staffing.
- Appreciating the tradeoffs between increasing human footfalls and preserving the sensitive ecosystems harbored in the preserve.

Learn More

Online at jrbp.stanford.edu

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