

Recent Nature Conservation Theory: Applications to California Rangeland Landscapes

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Stages / Concepts	Historical Context	Contributions
<p>4. Biological Diversity and Its Conservation (started late 1970s)</p> <ul style="list-style-type: none"> • Conservation biology • Ecological restoration • Eco-tourism 	<ul style="list-style-type: none"> • Crises of extinctions and habitat loss • Professional and scientific pressure to develop solutions for biodiversity • Recognition of indigenous rights • Ray Dasmann—first use of term “biodiversity;” challenge is outside of parks • Bruce Wilcox and Tom Lovejoy—new scientific and professional field, breaking off from natural resources management and wilderness preservation 	<ul style="list-style-type: none"> • Global system of causes and effects • Trans-border solutions • “Paper parks” inadequate • Biosphere Reserves (model with core, buffer and transition zones), Bioregions / Eco-cultural regions • Design of nature reserve systems • Focus on rehabilitation and restoration of degraded sites and systems
<p>5. Ecosystem Health and Stewardship (started 1990s)</p> <ul style="list-style-type: none"> • Sustainable development • Indigenous / local ecological knowledge • Environmental health linked to human health • Community participation • Ecosystem services • Wildlands as “gardens” 	<ul style="list-style-type: none"> • Crises of climate change, large wildfires, impoverishment, coastal erosion and inundation, urbanization of formerly rural areas, cultural diversity loss • British “countryside conservation” • Demand for local community engagement and environmental appreciation; strengthened relationships of producers and consumers • Increased awareness of indigenous management and requirements for management to maintain desired conditions 	<ul style="list-style-type: none"> • Private sector is key • Grazing is both a compatible use and beneficial for conservation purposes in annual grassland • Local food; integrate food production and environmental protection; reduced dependence on foreign-sourced energy • Adjusting public lands management to support local “working conservation landscapes” (grazing leases) • Manage to maintain and enhance desired conditions (control mass/height of Mediterranean grasses, fire hazards and pest plants)
<p>6. What’s on the Horizon?</p> <ul style="list-style-type: none"> • Incentives instead of penalties • Food security • Resilience • Private sector conservation 	<ul style="list-style-type: none"> • Crises of frequent extremes of weather • Conversion of remaining rangelands to crop agriculture and ex-urban ranchettes • Declining water supplies • Reduced political will and government funding • Dependence on ranchers for conservation (stewardship) services 	<ul style="list-style-type: none"> • Prioritize least-cost improvements and management of most urgent conservation problems • Use advanced technologies, e.g. high-res remote sensing • Land trusts, private coops, rancher stewards • Increasing levels of education of managers and ranchers, and thus sophistication of lease applications and management plans