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January – March 2003



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Lichen

- 1 **Lichen communities indicator results from Idaho: baseline sampling.** Neitlich, Peter; Rogers, Paul; Rosentreter, Roger. 2003. Gen. Tech. Rep. RMRS-GTR-103. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 14 p.

Ephiphytic lichen communities are included in the national Forest Health Monitoring (FHM) program because they help us assess resource contamination, biodiversity, and sustainability in the context of forest health. Results presented here are the baseline assessment of the statewide field survey. Seventy-five epiphytic macrolichen species were reported from Idaho.

Swift fox

- 2 **Vegetative characteristics of swift fox denning and foraging sites in southwestern South Dakota.** Uresk, Daniel W.; Severson, Kieth E.; Javersak, Jody. 2003. Res. Pap. RMRS-RP-38. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 4 p.

Vegetative characteristics of swift fox (*Vulpes velox*) denning and foraging habitats were studied in southwestern South Dakota. We followed 14 radio-collared foxes over a 2-year period and identified 17 den sites and 82 foraging sites. While previous studies have described swift fox macrohabitats with little vegetative cover (e.g., plowed fields or heavily grazed areas), our study showed that height-density of vegetation is important to these foxes.

Swift fox

- 3 **Detecting swift fox: smoked-plate scent stations versus spotlighting.** Uresk, Daniel W.; Severson, Kieth E.; Javersak, Jody. 2003. Res. Pap. RMRS-RP-39. Ogden, UT: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 5 p.

We compared two methods of detecting presence of swift fox: smoked-plate scent stations and spotlight counts. We determined that track stations could be used successfully to detect swift fox. We suggest a system of 1-mile (1.6-km)-long transects with four stations placed at 0.3-mile (0.5-km) intervals during late August and September. We also recommend counting tracks for 2 to 3 consecutive nights to ensure an adequate sample.

Strategic plan

- 4 **Strategic Framework for the Rocky Mountain Research Station.** 2003. Available: http://www.fs.fed.us/rm/main/strategic_plan.html. Print copies also available.

This document will help guide the Rocky Mountain Research Station over the next decade during inevitable socioeconomic and environmental change. It is the product of a dialog with stakeholders and employees. The document examines the Station's capabilities, anticipates research issues, and describes the Station's future role in providing scientific information for sustaining the world's natural resources.

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Atmosphere/climate

Intraspecific responses to climate in *Pinus sylvestris*. Rehfeldt, Gerald E.; Tchebakova, Nadejda M.; Parfenova, Yelena I.; Wykoff, William R.; Kuzmina, Nina A.; Milyutin, Leonid I. 2002. *Global Change Biology*. 8: 912–929.

Fire

Annual and decadal climate forcing of historical fire regimes in the interior Pacific Northwest, USA. Heyerdahl, Emily K.; Brubaker, Linda B.; Agee, James K. 2002. *The Holocene*. 12(5): 597–604.

Assessing the impacts of prescribed burning on soil and water resources of oak savannas in the southwestern United States. Gottfried, Gerald J.; Neary, Daniel G.; Bemis, Ronald. 2002. In: *Assessing capabilities of soil and water resources in drylands: the role of information retrieval and dissemination technologies; proceedings, IALC conference & workshop; 2002 October 20–25; Tucson, AZ*. Tucson: International Arid Lands Consortium: 115–122.

Effects of fire and post-fire salvage logging on avian communities in conifer-dominated forests of the Western United States. Kotliar, Natasha B.; Hejl, Sallie J.; Hutto, Richard L.; Saab, Victoria A.; Melcher, Cynthia P.; McFadzen, Mary E. 2002. *Studies in Avian Biology*. 25: 49–64.

Estimating canopy fuels in conifer forests. Scott, Joe H.; Reinhardt, Elizabeth D. 2002. *Fire Management Today*. 62(4): 45–50.

The cascading effects of fire exclusion in Rocky Mountain ecosystems. Keane, Robert E.; Ryan, Kevin C.; Veblen, Thomas T.; Allen, Craig D.; Logan, Jesse A.; Hawkes, Brad. 2002. In: Baron, Jill S., ed. *Rocky Mountain futures: an ecological perspective*. Washington, DC: Island Press: 133–152.

Small mammal community response to fire in short grass steppe of the southern Great Plains. Ford, Paulette L. 2001. In: Field, Rebecca; Warren,

Robert J.; Okarma, Henryk; Sievert, Paul R. *Wildlife, Land, and People: priorities for the 21st century*. Bethesda, MD: The Wildlife Society: 155–157.

Silviculture

Belowground and aboveground biomass in young postfire lodgepole pine forests of contrasting tree density. Litton, Creighton M.; Ryan, Michael G.; Tinker, Daniel B.; Knight, Dennis H. 2003. *Canadian Journal of Forest Research*. 33: 351–363.

Coppice thinning effects on transpiration in Emory oak woodlands. Shipek, D. Catlow; DeBano, Leonard F.; Gottfried, Gerald J. 2002. In: *Proceedings of the 2002 meetings of the hydrology section Arizona-Nevada Academy of Science; 2002 April 6; Glendale, AZ*. Hydrology and Water Resources in Arizona and the Southwest. 32: 19–22.

Reliance on stored water increases with tree size in three species in the Pacific Northwest. Phillips, N. G.; Ryan, M. G.; Bond, B. J.; McDowell, N. G.; Hinckley, T. M.; Cermák, J. 2003. *Tree Physiology*. 23: 237–245.

Tree growth and nutrient status in a water harvesting system using potable and treated wastewater. Karpiscak, Martin M.; Gottfried, Gerald J.; Hopf, Susan B. 2002. In: *Proceedings of the 2002 meetings of the hydrology section Arizona-Nevada Academy of Science; 2002 April 6; Glendale, AZ*. Hydrology and Water Resources in Arizona and the Southwest. 32: 23–32.

Western white pine development in relation to biophysical characteristics across different spatial scales in the Coeur d'Alene River basin in northern Idaho, U.S.A. Jain, Theresa B.; Graham, Russell T.; Morgan, Penelope. 2002. *Canadian Journal of Forest Research*. 32: 1109–1125.

Agroforestry

Agroforestry: mapping the way with GIS. Bentrup, Gary; Leininger, Tim. 2002. *Journal of Soil and Water Conservation*. 148A–153A.



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Assessment of concentrated flow through riparian buffers. Dosskey, M. G.; Helmers, M. J.; Eisenhauer, D. E.; Franti, T. G.; Hoagland, K. D. 2002. *Journal of Soil and Water Conservation*: 336–343.

Setting priorities for research on pollution reduction functions of agricultural buffers. Dosskey, Michael G. 2002. *Environmental Management*. 30(5): 641–650.

Watershed and riparian

Bird populations in riparian areas of southeastern Arizona in 1985–86 and 1994–95. Hall, Linnea S.; Morrison, Michael L.; Christoferson, Laurel L.; Martin, John; Bock, Carl E.; Strong, Thomas R. 2002. *Western North American Naturalist*. 62(3): 370–376.

Effects of anthropogenic fragmentation and livestock grazing on western riparian bird communities. Tewksbury, Joshua J.; Black, Anne E.; Nur, Nadav; Saab, Victoria A.; Logan, Brian D.; Dobkin, David S. 2002. *Studies in Avian Biology*. 25: 158–202.

Expanding institutional arrangements for acquiring water for environmental purposes: transactions evidence for the Western United States. Loomis, John B.; Quattlebaum, Katherine; Brown, Thomas C.; Alexander, Susan J. 2003. *Water Resources Development*. 19(1): 21–28.

Improving access to watershed management information. Haseltine, Michael; Hutchinson, Barbara; Baker, Malchus B., Jr. 2002. In: *Proceedings of the 2002 meetings of the hydrology section Arizona-Nevada Academy of Science; 2002 April 6; Glendale, AZ. Hydrology and Water Resources in Arizona and the Southwest*. 32: 113–120.

Riparian history of the Southwest. DeBano, Leonard F.; Ffolliott, Peter F. 2002. In: *Proceedings of the 2002 meetings of the hydrology section Arizona-Nevada Academy of Science; 2002 April 6; Glendale, AZ. Hydrology and Water Resources in Arizona and the Southwest*. 32: 33–38.

Watershed protection in Haiti after Hurricane Georges, September 1998. Jemison, Roy. 2002. In: *Proceedings of the 2002 meetings of the hydrology section Arizona-Nevada Academy of Science; 2002 April 6; Glendale, AZ. Hydrology and Water Resources in Arizona and the Southwest*. 32: 103–112.

Inventory and monitoring

Assessment of the line transect method: an examination of the spatial patterns of down and standing dead wood. Lutes, Duncan C. 2002. In: *Laudenslayer, William F., Jr.; Shea, Patrick J.; Valentine, Bradley E.; Weatherspoon, C. Phillip; Lisle, Thomas E., tech. coords. Proceedings of the symposium on the ecology and management of dead wood in western forests. Gen Tech. Rep. PSW-GTR-181. Albany, CA: U.S. Department of Agriculture, Forest Service, Pacific Southwest Research Station*: 665–675.

Integration of lidar and Landsat ETM+ data for estimating and mapping forest canopy height. Hudak, Andrew T.; Lefsky, Michael A.; Cohen, Warren B.; Berterretche, Mercedes. 2002. *Remote Sensing of Environment*. 82: 397–416.

Inventoried non-native and potentially invasive species on coterminous U.S. Forest Inventory and Analysis (FIA) forest plots. Rudis, Vic; Gray, Andrew; Jacobs, D. M.; Miller, Jim; O'Brien, Renee; Riemann, Rachel. 2002. In: *Monitoring of non-native invasive tree and other selected plant species affecting forest resources; the 7th annual Janet Meakin Poor research symposium: invasive plants—global issues, local challenges; 2002 October 27–30; Glencoe, IL. Program and abstracts*: 10–11.

Fish and wildlife

Opening rivers to trojan fish: the ecological dilemma of dam removal in the Great Lakes. Freeman, Ross; Bowerman, William; Grubb, Teryl; Bath, Allen; Dawson, Gary; Ennis, Kenneth; Best, David; Giesy, John. 2002. *Conservation In Practice*. 3(4): 35–40.

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Performance of greater sage-grouse models for conservation assessment in the Interior Columbia Basin, U.S.A. Wisdom, Michael J.; Wales, Barbara C.; Rowland, Mary M.; Raphael, Martin G.; Holthausen, Richard S.; Rich, Terrell D.; Saab, Victoria A. 2002. *Conservation Biology*. 16(5): 1232–1242.

Probable pheromonal attraction of sexually mature brook trout to mature male conspecifics. Young, Michael K.; Micek, Bradley K.; Rathbun, Michael. 2003. *North American Journal of Fisheries Management*. 23: 276–282.

Environmental management

Comparing five modelling techniques for predicting forest characteristics. Moisen, Gretchen G.; Frescino, Tracey S. 2002. *Ecological Modelling*. 157: 209–225.

Judged seriousness of environmental losses: reliability and cause of loss. Brown, Thomas C.; Nannini, Dawn; Gorter, Robert B.; Bell, Paul A.; Peterson, George L. 2002. *Ecological Economics*. 42: 479–491.

Measuring dispositions for lexicographic preferences of environmental goods: integrating economics, psychology and ethics. Rosenberger, Randall S.; Peterson, George L.; Clarke, Andrea; Brown, Thomas C. 2003. *Ecological Economics*. 44: 63–76.

Modeling multiple ecological scales to link landscape theory to wildlife conservation. Edwards, Thomas C., Jr.; Moisen, Gretchen G.; Frescino, Tracey S.; Lawler, Joshua J. 2003. In: Bissonette, John A.; Storch, Ilse, eds. *Landscape ecology and resource management: linking theory with practice*. Washington, DC: Island Press: 153–171.

The simulation of landscape fire, climate, and ecosystem dynamics. Keane, Robert E.; Finney, Mark A. 2003. In: Veblen, Thomas T.; Baker, William L.; Montenegro, Gloria; Swetnam, Thomas W., eds. *Fire and climatic change in temperate ecosystems of the western Americas*. New York: Springer-Verlag: 32–66.

Recreation/wilderness

Benefits: the basis for action. Manfredo, Michael J.; Driver, B. L. 2002. In: Manfredo, Michael J., ed. *Wildlife viewing: a management handbook*. Corvallis, OR: Oregon State University Press: 43–69.

Leisure identities, globalization, and the politics of place. Williams, Daniel R. 2002. *Journal of Leisure Research*. 34(4): 351–367.

The meaning of place; attachments of Femundsmarka National Park, Norway, among tourists and locals. Kaltenborn, Bjørn P.; Williams, Daniel R. 2002. *Norwegian Journal of Geography*. 56: 189–198.



World Wide Web Publications

These are a few of the publications available electronically on our Web site:
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- Bird counts of burned versus unburned big sagebrush sites.** Welch, Bruce L. 2002. Res. Note RMRS-RN-16. 6 p.
- Cascading effects of fire exclusion in the Rocky Mountain ecosystems: a literature review.** Keane, Robert E.; Ryan, Kevin C.; Veblen, Tom T.; Allen, Craig D.; Logan, Jesse; Hawkes, Brad. 2002. Gen. Tech. Rep. RMRS-GTR-91. 24 p.
- Ecology, silviculture, and management of Black Hills ponderosa pine.** Shepperd, Wayne D.; Battaglia, Michael A. 2002. Gen. Tech. Rep. RMRS-GTR-97. 112 p.
- From the Rio to the Sierra: an environmental history of the middle Rio Grande Basin.** Scurlock, Dan. 1998. Gen. Tech. Rep. RMRS-GTR-5. 440 p.
- Integrating ecosystem sampling gradient modeling, remote sensing, and ecosystem simulation to create spatially explicit landscape inventories.** Keane, Robert E.; Rollins, Matthew G.; McNicoll, Cecilia H.; Parsons, Russell A. 2002. Gen. Tech. Rep. RMRS-GTR-92. 61 p.
- Linking wilderness research and management: volume 1—wilderness fire restoration and management: an annotated reading list.** Hourdequin, Marion. 2001. Gen. Tech. Rep. RMRS-GTR-79-vol 1.
- Management and techniques for riparian restorations: roads field guide. Vol. I and II.** Roads/Riparian Restoration Team. 2002. Gen. Tech. Rep. RMRS-GTR-102 Vol. I and II. 38 p.
- Mistletoes of North American conifers.** Geils, Brian W.; Cibrián Tovar, Jose; Moody, Benjamin, tech. coords. 2002. Gen. Tech. Rep. RMRS-GTR-98. 123 p.
- Opportunities for making wood products from small diameter trees in Colorado.** Lynch, Dennis L.; Mackes, Kurt H. 2002. Res. Pap. RMRS-RP-37. 11 p.
- Santa Rita Experimental Range digital database: user's guide.** McClaran, Mitchel P.; Angell, Deborah L.; Wissler, Craig. 2002. Gen. Tech. Rep. RMRS-GTR-100. 13 p.
- Second Forest Vegetation Simulator conference.** Crookston, Nicholas L.; Havis, Robert N., comps. 2002. Proceedings RMRS-P-25. 208 p.
- Stopover ecology of landbirds migrating along the middle Rio Grande in spring and fall.** Yong, Wang; Finch, Deborah M. 2002. Gen. Tech. Rep. RMRS-GTR-99. 52 p.
- Survey results of the American public's values, objectives, beliefs, and attitudes regarding forests and grasslands: a technical document supporting the 2000 USDA Forest Service RPA assessment.** Shields, Deborah J.; Martin, Ingrid M.; Martin, Wade E.; Haefele, Michelle A. 2002. Gen. Tech. Rep. RMRS-GTR-96. 35 p.
- Users guide to the Most Similar Neighbor Imputation program version 2.** Crookston, Nicholas L.; Moeur, Melinda; Renner, David. 2002. Gen. Tech. Rep. RMRS-GTR-96. 35 p.
- Vegetative characteristics of swift fox denning and foraging sites in southwestern South Dakota.** Uresk, Daniel W.; Severson, Kieth E.; Javersak, Jody. 2003. Res. Pap. RMRS-RP-38. 4 p.
- Wilderness in the circumpolar North: searching for compatibility in ecological, traditional, and ecotourism values.** Watson, Alan E.; Alessa, Lilian; Sproull, Janet, comps. 2002. Proceedings RMRS-P-26. 142 p.
- Wildland fire in ecosystems: effects of fire on air.** Sandberg, David V.; Ottmar, Roger D.; Peterson, Janice L.; Core, John. 2003. Gen. Tech. Rep. RMRS-GTR-42-vol. 5. 79 p.
- Wildland fire in ecosystems: effects of fire on fauna.** Smith, J. K., ed. 2000. Gen. Tech. Rep. RMRS-GTR-42-vol. 1.
- Wildland fire in ecosystems: effects of fire on flora.** Brown, J. K.; Smith, J. K., eds. 2001. Gen. Tech. Rep. RMRS-GTR-42-vol. 2.





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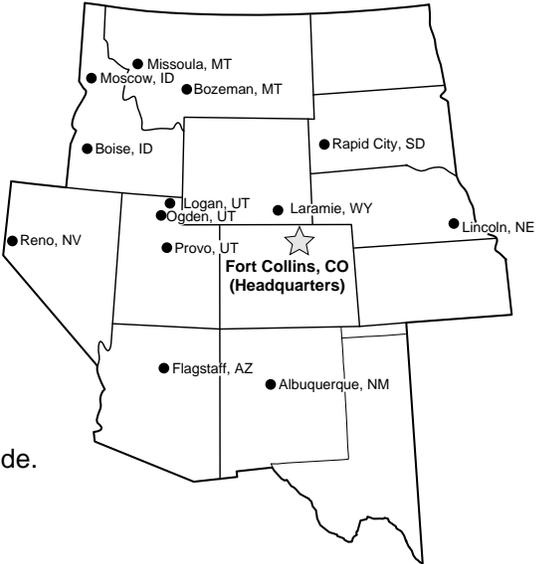
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