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Cover: Agricultural Research Service scientists measure erodibility of a cropland soil near Cottonwood, South Dakota, using a rainfall simulator. See pages 27-44. ARS photo by Tim McCabe.

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THE SWCS VIEW



The mission of the Soil and Water Conservation Society is to advocate the conservation of soil, water, and related natural resources.

As a multidisciplinary organization, SWCS synthesizes the results of research, experience, and custom in developing a knowledge base that is communicated worldwide. Through education and example, SWCS promotes a stewardship ethic that recognizes the interdependence of people and natural resources.

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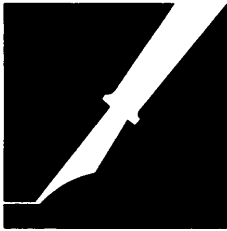
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PEN POINTS

Bad Chinese example?

I must point out that the vegetation on the terraces depicted on the front cover of the *JSWC*, September-October 1990, is not caragana, as stated inside that issue, but is undoubtedly a poplar. The dead wood depicted here adds fuel to my conviction that the widespread use of poplar and willow on loess terraces in China and Inner Mongolia is counterproductive. After touring these areas for the better part of three weeks this summer, on a People to People tour, I came to the sorry conclusion that many of the "conservation practices," such as those depicted on the journal cover, were actually counterproductive. We should not put them forth as laudable examples.

Robert W. Duell
Rutgers University
New Brunswick, New Jersey

Who calls the shots

William Lockeretz's conclusion that we have learned "precious little about which farmers conserve soil and water" is right on target ["What Have We Learned About Who Conserves Soil?", *JSWC*, September-October 1990, pp. 517-523]. He points out quite graphically that variables such as age, education, etc., have shown very little ability to explain farmers' use, or nonuse, of conservation practices.

He hints at what I believe is a most useful, but heretofore, unasked question, Who calls the shots?—the operator, the landlord, the banker, the father, or maybe even the spouse? Once we know that, it seems prudent to find out what the shot caller believes about conservation. That should lead to better correlations as an explanatory variable than age or education.

Also, there are two important and related questions: who are the conservation "salespersons/promoters" in the community and what contact or influence has the "promoter" had with the shot caller and the operator?

As an example, data from the Conservation Technology Information Center indicates that some counties have had significant increases in no-till

soybeans over the past several years. Anecdotal observations indicate this may be explained largely by the presence of an aggressive equipment dealer, chemical dealer, or an equipment demonstration program from the local soil and water conservation district board, either working separately or together, acting as a promoter "selling" the idea. In other words, adoption of no-till soybeans in these counties probably had little to do with the traditional explanatory variables of operator age, education, tenure, or farm size that most researchers seem to study.

It is time for the U.S. Department of Agriculture and other grant makers to start asking for "better research," not simply more of what hasn't worked. It is time to find out who calls the shots on conservation decisions.

Jim Porterfield
American Farm
Bureau Federation
Park Ridge, Illinois

Soil compaction

ARS researcher Ward Voorhees ["Winters can't undo modern compaction," November-December 1990, page 632] states years of freezing winters cannot undo the damage of soil compaction in Minnesota. Such

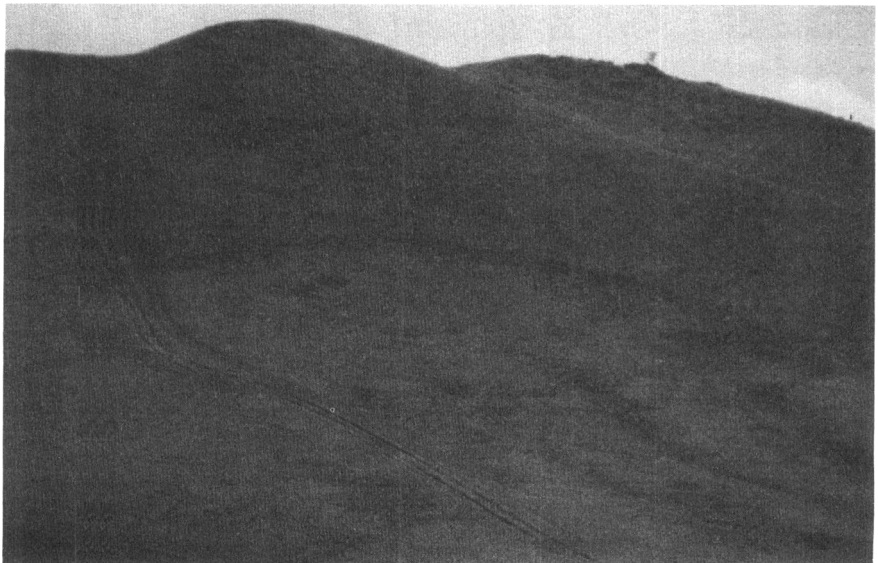
compaction lasts much longer in arid Wyoming. The circle on nearby Ring Mountain (see photo) may have been established by Indians walking their ponies around on a tether over 200 years ago. [Incidentally, soil tests indicated higher phosphate levels "on" the ring than in adjacent soils. Perhaps the Indians laid down bones to be trampled into the soil by ponies. The ring is "hi-tited" by an abundance of silver sage (*Artemisia cana*)]. Regardless of compaction on the ring, the ATV tracts disfiguring the ring are still visible after nearly 40 years. By fall arid soils contain insufficient moisture for frost heaving to occur.

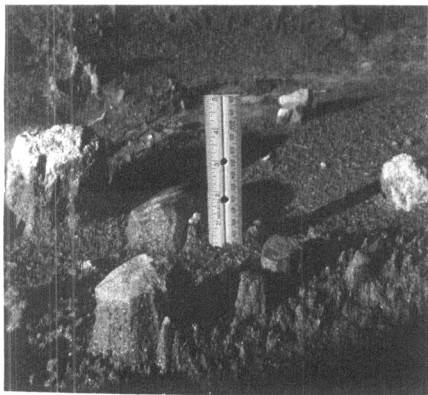
William S. Brenneman
Jelm, Wyoming

Visible sheet erosion

I am writing about a phenomenon I have observed on several occasions in South Carolina and North Carolina. It involves a pedestal of soil with a rock on top. I assume this has been documented before, but I have yet to see anything on it.

It appears the rock has protected the column of soil underneath from raindrop impact. However, the surrounding soil has been eroded away. This provides a record of sheet erosion over the growing season (these





pedestals seldom survive the winter due to frost heave and freezing and thawing). The rock wasn't necessarily on the soil surface at the beginning of the season. Thus the pedestal may record less than the actual amount of erosion.

As a former Soil Conservation Service employee I know how difficult it can be to explain the concept of sheet erosion. It's even more difficult to convince a farmer of the problem. Gully erosion from a concentrated flow is easy enough to see, but a thin sheet of soil removed from a field is more difficult to prove. A concentrated flow would have washed these pedestals away. Thus these pedestals are a testament to the erosive impact of raindrops and the ability of a thin sheet

of water to wash away a thin sheet of soil. So even fields without gullies can have major erosion problems.

These pedestals will probably be found only on the more plastic soils. However sheet erosion can occur on all but the sandiest soils (where there will be good infiltration). These pedestals, however, help to prove that sheet erosion is more than just a theory.

The photograph (left) shows pedestals on steeper slopes indicating an inch of soil lost; but a quarter inch lost per season is still serious.

Ben Cushion
Easley, South Carolina

CRMP expansion

Again, the *JSWC* has been notably effective in promoting the coordinated resource management planning (CRMP) process, this time, internationally.

Recently, Bob Baum and I each received a letter and documents from Melbourne, Australia, informing us that the State of Victoria has a version of our CRMP that they call LandCare: "LandCare is underpinned by the principles of cooperation and mutual benefit. LandCare can tackle land degradation via local ownership of the problems and solutions that run across

individual property boundaries. It is a program to encourage good land management through coordinated group action at the local level. LandCare groups tackle the range of land protection issues in their area, though they often concentrate initially on a single issue, e.g., salinity, rabbits. Government (Department of Conservation and Environment), and the Victorian Farmers Federation are cosponsors of LandCare. Groups are eligible to receive technical and financial assistance from Government."

The writer is Marion Pennicuik, LandCare coordinator (Victoria). He referred to our article "CRMP—Does it Work?" [*JSWC*, May-June 1987, pp. 161-166] and indicated that LandCare exemplifies how the CRMP process is working in Victoria. He also stated that LandCare has recently gone national in Australia and that New Zealand is currently studying the Victorian model to adapt to their situation. This is great news.

A little background. In May 1984, I presented the CRMP process at the Second International Rangeland Congress in Adelaide, Australia. Shortly thereafter, I learned that a version of our CRMP process had been used successfully to formulate a coordinated plan for an island near Perth, Australia. Our two CRMP articles were published in the *JSWC* in 1987 and 1988 ["How to do Coordinated Resource Management Planning," *JSWC*, May-June 1988, pp. 216-220]. According to Pennicuik, LandCare was initiated in Victoria in November 1986 and activity increased markedly beginning late in 1988.

I'd like to think there may be a relationship between this sequence of events and that this is yet another case where the *JSWC* is due much credit for effectively disseminating the CRMP program nationally and internationally. For example, requests for copies of our two CRMP articles have come from Australia; Czechoslovakia; India; Israel; New Zealand; South Africa; the Canadian provinces of Alberta, British Columbia, Manitoba, Ontario; and 24 states in the United States. Obviously, the *JSWC* has helped make significant progress in the 1974 agreement between NACD [National Association of Conservation Districts] and SRM [Society for Range Management] that was to promote CRMP nationally and, at which time, Bob Baum was designated by NACD and I by SRM to expedite this effort. We are still working at it.

It is interesting to note the organizational similarity of LandCare to that of CRMP in Oregon. LandCare is a group of local people working

together to improve their area and are involved in planning, implementation, and maintenance of projects. In Oregon, local CRMP planning teams, working with conservation districts, function this same way.

The Victorian Farmers Federation sponsors LandCare and has a liaison officer to focus on the program. The Oregon Association of Conservation Districts promotes CRMP throughout the state and has a delegate representative on the CRMP task group; the OACD president is a member of the CRMP executive group.

LandCare differs in that one agency—the Victorian Department of Conservation and Environment—is the lead agency and provides a full-time LandCare coordinator and staff. In Oregon, CRMP leadership changes annually as it rotates sequentially among five federal and six state agencies and OACD, all of whom are signatory to the program. Oregon's organization presents a potential weakness in the program because of the widely varying degree of interest in and commitment to the CRMP process among so many agencies.

This documented expansion of the use of the CRMP process into Australia is gratifying. The ingenuity used to accommodate the CRMP process to various situations, while maintaining resolution of local issues at the local level with a minimum of bureaucracy, is noteworthy.

E. William Anderson
Lake Oswego, Oregon

The ultimate cop-out

Professor Donald Hanway [*JSWC*, "Viewpoint," September-October 1990, p. 510] repeats the tiresome lament of one-world-ers, to wit: The citizens of the USA continue to refuse to surrender their national sovereignty, hard-won and repeatedly defended at great cost, to the collectivists and bureaucrats in the United Nations Organization.

Specifically, he chides us because the U.S. government in recent years has declined to help finance population control agencies and programs that counsel, advocate, and participate in terminating prenatally the lives of human infants. The U.S. government has not ceased to support bona fide family planning programs in foreign countries that rely on contraception as their principal operational tactic, but during the past decade has refused to acknowledge the killing of children as a legitimate "family planning" tactic.

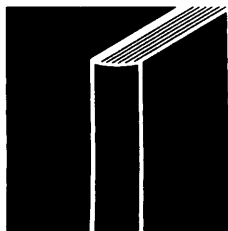
If killing the weak and helpless is to become an accepted element of resource conservation strategies, then I will choose to have no part of organized conservation efforts.

I don't know what level of extermination will be required in order to ensure that the survivors may enjoy the intensity of resource consumption that is characterized by the upper middle class American lifestyle, but I am certain that it will become necessary to look beyond the unborn for victims. As it happens, quite naturally, all of us are approaching that age cohort in which there is to be found the next largest number of weak,

often helpless and mentally incompetent people, obvious candidates. And the advocates of death (someone else's) as a response to socioeconomic challenges (and also, incidentally, to the "problem" of personal inconvenience) are making remarkable progress in constructing the moral, ethical, and legal framework needed for routinely terminating the aged and infirm.

Widespread acceptance of this utilitarian attitude toward human life debases all of us and represents the ultimate cop-out of conservationists.

Leonard C. Johnson
Troy, Idaho



BOOKS, ETC.

Agriculture

Holistic Resource Management

Workbook. By Sam Bingham and Alan Savory. 181 pp., illus., apps., gloss., index, 1990. Island Press, Covelo, Calif. 95428. \$24.95.

What Farmers Need to Know About Environmental Law. Iowa Edition. By Neil D. Hamilton. 189 pp., illus., 1990. Drake University Agricultural Law Center, Des Moines, Iowa 50311. \$20.00.

Farming Systems for Iowa: Seeking Alternatives. Leopold Center for Sustainable Agriculture 1990 Conference Proceedings. 112 pp., illus., refs., app., 1990. Leopold Center for Sustainable Agriculture, Iowa State University, Ames, 50011-3120. \$9.00.

Cropland Conservation Farm Planning: A Guide to Conservation Techniques and System Selections. By Brad

Glasman, Andrew Graham, and Don Dool. 24 pp., illus., refs., 1990. Upper Thames River Conservation Authority, R.R. 6, London, Ontario, N6A 4C1.

General

Planet Under Stress: The Challenge of Global Change. Edited by Constance Mungall and Digby J. McLaren. 352 pp., illus., 1990. Joanne Shurvell, Trade Publicity, Oxford University Press, 70 Wynford Drive, Don Mills, Ontario, M3C 1J9. \$18.95.

Economics of Protected Areas: A New Look at Benefits and Costs. By John A. Dixon and Paul B. Sherman. 234 pp., illus., refs., tpls., 1990. Island Press, Covelo, Calif. 95428. \$34.95, cloth; \$19.95, paperback.

Keeping Your Company Green. By Stefan Bechtel, and Editors of Rodale Press. 92 pp., 1990. Rodale Press, Inc., Emmaus, Pa. 18098.

Nature and the American: Three Centuries of Changing Attitudes. By Hans Huth. 250 pp., illus., refs., bibliog., index, 1990. University of Nebraska Press, Lincoln, 68588-0520.

Soils

Proceedings of Soil Erosion and Productivity Workshop. Edited by W. E. Larson, G. R. Foster, R. R. Allmaras, and C. M. Smith. 142 pp., illus., 1990. Soil Science Department, University of Minnesota, St. Paul, 55108. \$25.00.

Fundamentals of Soil Science. (Eighth edition). By Henry D. Foth. 360 pp., illus., apps., gloss., index, 1990. John Wiley and Sons, Inc., Somerset, N.J. 08875-1272. \$49.95.

Advances in Soil Science (Volume 14). Edited by B. A. Stewart. 196 pp., illus., refs., index, 1990. Springer-Verlag, New York, N.Y. 10010. \$79.00.

Water

Overtapped Oasis: Reform or Revolution for Western Water. By Marc Reisner and Sarah Bates. 196 pp., apps., bibliog., index, 1990. Island Press, Covelo, Calif. 95428. \$31.95, cloth; \$17.95, paper.

1990 River Conservation Directory. 111 pp., index, 1990. Document #024-005-01058-1. U.S. Government Printing Office, Washington, D.C. 20402-9325. \$6.00.

Beneath the Bottom Line: Agricultural Approaches to Reduce Agrichemical Contamination of Groundwater—Summary. 80 pp., illus., app., 1990. 052-003-01191-3. U.S. Government Printing Office, Washington, D.C. 20402-9325. \$4.00.

Citizen's Guide to Ground-Water Protection. 33 pp., refs., apps., 1990. EPA 440/6-90-004. U.S. Government Printing Office, Washington, D.C. 20402.

Hydrology and the Management of Watersheds. By Kenneth N. Brooks, Peter F. Ffolliott, Hans M. Gregersen, and John L. Thames. 402 pp., illus., refs., app., index, 1991. Iowa State University Press, Ames, 50010. \$5.95, plus \$2.00 for postage and handling.