

Other Environmental Effects

273. **After the CRP contract expires.**

Cacek, T.

Journal of Soil and Water Conservation 43 (4): 291-293. (1988)

NAL Call #: 56.8 J822; ISSN: 0022-4561

Descriptors: erosion/ soils/ conservation/ vegetation/ landslides and erosion

Abstract: The Conservation Reserve Program will convert 40 million to 45 million acres of highly erodible cropland to perennial vegetation and will become one of the most important conservation and commodity supply control programs in U.S. history. Its overall impact, however, will depend largely on the fate of the land after the 10 year contracts expire. The Soil Bank of the late 1950s and early 1960s serves as a model of what could happen but which conservationists must not allow to happen with CRP. The Soil Bank enrolled several million acres of hayland and established an additional 21 million acres of cover under multi-year contracts. Of this, just over 2 million acres were planted to trees. When the contracts expired, virtually all of this land, with the exception of the acreage in tress, was returned to crop production. While the Soil Bank provided a decade of soil erosion control and superb pheasant hunting, it produced few long-term benefits on most acres.

© Cambridge Scientific Abstracts (CSA)

274. **Agricultural Conservation: Status of Programs That Provide Financial Incentives.**

General Accounting Office

Washington, DC: GAO; 60 p. (1995)

Notes: Report No.: GAO/RCED-95-169

<http://www.gao.gov/archive/1995/rc95169.pdf>

Descriptors: USA/ economics/ land use/ agriculture/ conservation/ federal programs/ economic analysis/ sociological aspects/ soil conservation/ erosion control/ environmental protection/ pollution control/ habitat improvement/ farms/ water pollution control/ wildlife conservation/ Environmental action/ Protective measures and control/ Watershed protection

Abstract: The Agriculture Department (USDA) administers 17 programs that provide financial incentives to farmers and ranchers who use conservation measures. Under 10 of the programs, USDA, through direct payments or low-cost loans, helps defray the cost of implementing conservation practices. Under the other seven programs, USDA purchases easements or rents land in order to retire it from agricultural production. The incentive-based conservation programs are intended to encourage voluntary efforts to reduce soil erosion, lessen water pollution, enhance fish and wildlife habitat, and address other conservation concerns. This report provides information on these incentive-based

programs since fiscal year 1992, including information on their budgets and levels of activity and on the primary purposes of the conservation measures taken under the programs. GAO also identifies potential options for consolidating them. © Cambridge Scientific Abstracts (CSA)

275. **Agricultural conservation: USDA needs to better ensure protection of highly erodible cropland and wetlands: Report to the ranking Democratic member, Committee on Agriculture, Nutrition, and Forestry, U.S. Senate.**

United States. General Accounting Office.

U.S. General Accounting Office, 2003.

Notes: Cover title./ "April 2003./" Chiefly tables./ Includes bibliographical references (p. 106).

<http://www.gao.gov/new.items/d03418.pdf>

Descriptors: Agricultural conservation---United States/ Soil conservation---United States/ Wetland conservation---United States

276. **Alfalfa persistence under infrequent cutting.**

Sheaffer, C. C.; Grimsbo Jewett, J.; Barnes, D. K.; Lueschen, W. E.; Swanson, D. R.; and Matthison, R. *Journal of Production Agriculture* 10 (4): 558-561. (Oct. 1997-Dec. 1997)

NAL Call #: S539.5.J68; ISSN: 0890-8524 [JPRAEN]

Descriptors: medicago sativa/ cultivars/ phleum pratense/ crop mixtures/ fodder crops/ cutting frequency/ persistence/ survival/ stand characteristics/ disease resistance/ clavibacter Michiganensis subsp insidiosus/ fusarium oxysporum f sp medicaginis/ colletotrichum trifolii/ bacterial diseases/ fungal diseases/ federal programs/ Minnesota/ phytophthora medicaginis/ Conservation Reserve Program

Abstract: Alfalfa (*Medicago sativa* L.) cultivars have been developed for modern forage production systems with three or four cuts per year. Little is known about persistence of alfalfa cultivars in unharvested systems such as Conservation Reserve Program (CRP) fields. Our objective was to determine the stand persistence of alfalfa cultivars that were not harvested or harvested once per year. Twenty-three alfalfa cultivars representing a range of fall dormancy and disease resistance were established in binary mixture with timothy (*Phleum pratense* L.) at Becker, Grand Rapids, Morris, Rosemount, and Waseca, MN. Cutting treatments, which included a single cut per year (about 1 August) or no cutting were applied for 3 yr. Cutting treatment effects at Rosemount, Becker, Grand Rapids, and Waseca suggest that annual cutting of alfalfa-grass mixtures on CRP land would enhance alfalfa persistence, but stand survival of many cultivars was lower than that normally observed in cultivar trial plots

cut three or four times per year. At Becker and Morris, fall dormancy was a good predictor of stand survival. There was no relationship between stand survival and disease resistance of cultivars. Annual mowing should be considered as a tool for maintaining alfalfa in CRP fields at some locations, but cultivars designed for the CRP program, which normally does not allow cutting, are needed.

This citation is from AGRICOLA.

277. America's Conservation Reserve Program: Rural planning or just another subsidy.

Daniels, T. L.

Journal of Rural Studies 4 (4): 405-411. (1988)

NAL Call #: HT401.J68; ISSN: 0743-0167

Descriptors: rural planning/ land diversion/ eroded soils/ federal programs/ erosion control/ United States

This citation is from AGRICOLA.

278. Applying input-output models to natural resource problems: The Conservation Reserve Program.

Bernat, G. A. Jr. and Johnson, T. G.

In: *Evaluating natural resource use in agriculture/* Robertson, T.; English, B. C.; and Alexander, R. R. Ames, IA: Iowa State University Press, 1998; pp. 297-317.

Notes: ISBN: 0813829585; 1st ed.; Paper presented at the Atlantic Economic Society's Thirtieth International Conference, Oct 11-14, 1990, Williamsburg, Virginia

NAL Call #: S22.E835-1998

Descriptors: input output analysis/ federal programs/ mathematical models

This citation is from AGRICOLA.

279. Boll weevil overwintering in CRP grasses on the Texas High Plains.

Carroll, S. C. and Rummel, D. R.

Proceedings - Beltwide Cotton Production Research Conferences: 297-299. (1990)

NAL Call #: SB249.N6 [BCOPB].

Notes: Meeting held January 9-14, 1990, Las Vegas, Nevada. Includes references.

Descriptors: anthonomus grandis/ overwintering/ survival/ winter/ grasses/ gramineae/ grasslands/ nature conservation/ conservation areas/ eragrostis curvula/ quercus/ litter plant/ Texas/ Conservation Reserve Program

This citation is from AGRICOLA.

280. Broadleaf weed control in Conservation Reserve Program (CRP) grass plantings.

Adams, E. B. and Swan, D. G.

Research Progress Report - Western Society of Weed Science: 367. (1988)

NAL Call #: 79.9-W52R; ISSN: 0090-8142

Descriptors: lawns and turf/ descurainia pinnata/ sisymbrium altissimum/ salsola iberica/ herbicide application/ herbicide mixtures/ Washington
This citation is from AGRICOLA.

281. Changes in ecosystem structure and function along a chronosequence of restored grasslands.

Baer, S G; Kitchen, D J; Blair, J M; and Rice, C W
Ecological Applications 12 (6): 1688-1701. (2002)

NAL Call #: QH540.E23; ISSN: 1051-0761

Descriptors: Conservation Reserve Program/ aboveground vegetation/ chronosequence/ ecosystem structure/ restored grasslands/ soil characteristics/ tallgrass prairie/ vegetation composition

Abstract: Changes in aboveground vegetation, roots, and soil characteristics were examined from a 12-yr chronosequence of formerly cultivated fields restored to native C4 grasses through the Conservation Reserve Program (CRP). Following 6-8 yr in the CRP, the native grasses dominated vegetation composition, and the presence of forbs was negligible. Productivity of the restored grasslands did not exhibit any directional changes with the number of years in the CRP, and productivity was generally higher than native prairie in this region. Over time, the restored grasslands accumulated root biomass of decreasing quality as indicated by increasing root biomass and C:N ratio of roots along the 12-yr chronosequence. Root biomass, root C:N ratio, C storage in roots, and N storage in roots of restored grasslands approached that of native tallgrass prairie within the 12 yr of restoration. Establishment of the perennial vegetation also affected soil physical, chemical, and biological characteristics. Soil bulk density in the surface 10 cm decreased with time since restoration. Total C, microbial biomass C, and C mineralization rates increased as a function of time since restoration. The greatest change in total C occurred in the surface 5 cm, where total C was 26% greater in 12- vs. 2-yr restored grasslands. Extractable soil nitrate and soil N transformations (i.e., net N mineralization rates and net nitrification rates) declined over the restoration chronosequence, but these values were not representative of steady-state conditions due to the high variability in these measures among the native prairies. Although complete restoration of ecosystem structure and function was not the primary intention of the CRP, this study demonstrates that establishment of the matrix vegetation (i.e., native C4 grasses) drives ecosystem processes in the trajectory of the original system. Moreover, restoration may hasten the recovery of soil C pools relative to formerly cultivated systems undergoing natural succession.

© Thomson

282. Conservation Reserve Program: Alternatives are available for managing environmentally sensitive cropland: Report to the Committee on Agriculture, Nutrition, and Forestry, U.S. Senate.
United States. Congress. Senate. Committee on Agriculture, Nutrition and Forestry. and United States. General Accounting Office.

Washington, D.C.: U.S. General Accounting Office; 68 p.: ill., maps. (1995)

Notes: Cover title. "February 1995." "GAO/RCED-95-42." "B-258910"--P. [1]. Includes bibliographical references. SUDOCs: GA 1.13:RCED-95-42.

NAL Call #: S624.A1C66--1995

Descriptors: Conservation Reserve Program---United States/ Soil conservation---Government policy---United States

This citation is from AGRICOLA.

283. The Conservation Reserve Program: An economic perspective.

Bartlett, E. T. and Trock, W. L.

Rangelands 9 (4): 147-148. (Aug. 1987)

NAL Call #: SF85.A1R32; *ISSN:* 0190-0528

Descriptors: soil and water conservation/ environmental legislation/ no-tillage/ wildlife conservation/ agricultural economics/ grasses/ legumes/ woody plants/ state government/ reserves/ United States/ Texas/ Colorado

This citation is from AGRICOLA.

284. Conservation Reserve Program: Implementation and accomplishments, 1986-87.

Dicks, Michael R.; Llacuna, Felix.; Linsenbigler, Michael.; and United States. Dept. of Agriculture. Economic Research Service.

Washington, D.C.: U.S. Dept. of Agriculture, Economic Research Service; v, 119 p. (1988)

Notes: Cover title. "January 1988" -- P. i. Bibliography: p. 10.

NAL Call #: 1-Ag84St-no.763

Descriptors: Conservation Reserve Program---Evaluation/ Soil conservation---Law and legislation---United States/ Soil Bank program

This citation is from AGRICOLA.

285. The Conservation Reserve Program Montana perspective.

Johnson, J. B.

Proceedings of the Great Plains Agricultural Council: 109-121. (1986)

NAL Call #: 282.9-G7992; *ISSN:* 0434-5835 [PGPCA]

Descriptors: land capability/ erosion/ rents/ legislation/ agricultural crises/ agricultural and rural law/ input output analysis/ Montana/ food and security act of 1985

This citation is from AGRICOLA.

286. Conservation Reserve Program: North Dakota Enhancement Program.

United States. Farm Service Agency.

Washington, D.C.: USDA, Farm Service Agency; Series: Fact sheet (United States. Farm Service Agency). (2001)

Notes: Title from caption. Ed. statement on html version only. "January 2001."

NAL Call #: aHD1775.N9-C65-2001

http://www.fsa.usda.gov/pas/publications/facts/html/cr_epnd01.htm

Descriptors: North Dakota Enhancement Program/ Conservation of natural resources---Economic aspects---North Dakota/ Water quality management--Economic aspects---North Dakota/ Agriculture---Economic aspects---North Dakota

This citation is from AGRICOLA.

287. Conservation Reserve Program: Tree thinning.

United States. Farm Service Agency.

Washington, D.C.: USDA, Farm Service Agency; Series: Fact sheet (United States. Farm Service Agency). (1999)

Notes: Electronic ed.; Title from caption. Ed. statement on html version only. "July 1999."

NAL Call #: aS930-.C659-1999

<http://www.fsa.usda.gov/pas/publications/facts/html/crp%5Ftreethinning99.htm>

Descriptors: Conservation Reserve Program---United States/ Forest thinning---United States/ Conservation of natural resources---United States/ Wildlife habitat improvement---United States

This citation is from AGRICOLA.

288. The Conservation Reserve Program: Where are we heading?

Goetz, H.

Rangelands 11 (6): 251-252. (Dec. 1989)

NAL Call #: SF85.A1R32; *ISSN:* 0190-0528

Descriptors: resource conservation/ programs/ impact/ environmental impact

This citation is from AGRICOLA.

289. Conservation reserve tree planting: Can we improve upon success?

West, A. J.

Journal of Soil and Water Conservation 43 (1): 66-67. (1988)

NAL Call #: 56.8 J822; *ISSN:* 0022-4561

Descriptors: conservation/ wildlife/ habitats/ trees/ ecology/ Basic approaches, Concepts and Theory

Abstract: If one thing is certain, it is that the Conservation Reserve Program presented foresters and landowners with both an opportunity and a challenge. Of a vast array of practices that can be applied on CRP acres, including grasses, windbreaks, trees, wildlife habitat, diversions,

structures, and shallow water areas for wildlife, only one of these--tree planting--has a goal that's etched in the language of the law itself.

© Cambridge Scientific Abstracts (CSA)

290. Contribution of the Conservation Reserve Program to General Landscape Structure in Illinois.

Weber, W. L.; Roseberry, J. L.; and Woolf, A.
In: 16th Annual Symposium of US-International Association of Landscape Ecology. (Held 25 Apr 2001-29 Apr 2001 at Temple, AZ (USA).); 2001.

Notes: Conference Sponsor: The National Endowment for the Arts, U.S. Environmental Protection Agency (Landscape Ecology Branch) Arizona Commission on the Arts; World Meeting Number 000 5525

Descriptors: Biology/ Environmental Science
© Cambridge Scientific Abstracts (CSA)

291. CRP: Evaluating the options.

Ohlenbusch, Paul D.; Langemeier, Michael R.; and Watson, Steve L.

Cooperative Extension Service, Kansas State University, 1995.

Notes: 24 pp.: ill.; Cover title. "March 1995"--P. [4] of cover. Includes bibliographical references (p. 9). (application/pdf)

NAL Call #: S544.3.K2K3-no.2078

<http://www.oznet.ksu.edu/library/crpsl2/mf2078.pdf>

292. The CRP in Oregon's Columbia basin: A local perspective.

Carlson, Louis and Bedell, Thomas E.

In: The Conservation Reserve: Yesterday, Today and Tomorrow, Symposium Proceedings. (Held 14 Jan 1991 at Washington, D.C.); pp. 63-65; 1991 .

Notes: U.S. For. Serv. Gen. Tech. Rep. RM No. 203; WR 238

Descriptors: Conservation Reserve Programs/ conservation programs/ public relations/ North America/ United States/ Oregon

This citation is provided courtesy of NISC, publisher of Wildlife & Ecology Studies Worldwide.

293. Das Conservation Reserve Program der USA: Eine Moeglichkeit zur effizienten Entlohnung von Umweltleistungen der Landwirtschaft?

Mello, Inken; Heissenhuber, Alois; and Kantelhardt, Jochen

Berichte ueber Landwirtschaft 80 (1): 85-93.

(Mar. 2002); *ISSN:* 0005-9080.

Notes: Language: German

Descriptors: American Conservation Reserve Program/ agricultural environmental program/ environmental protection/ farmer service reward system/ national economy/ private farm management/ program transfer potential

Abstract: When implementing agricultural environmental programmes, the main problems frequently revolve round the expense and the rake-off effects. If these programmes are too general in nature, they generate high rake-off effects, if they are too detailed, the costs of control and implementation rise. With the "Conservation Research (sic) Program", the USA appears to have succeeded in developing an efficient environmental programme, and in readying it for practical implementation. This article describes the programme, discussing its implementation on a private farm and looking into its ecological consequences for the national economy. In conclusion, the author points to the potential for transferring this programme to Germany.

© Thomson

294. Early results from an old-field loblolly pine spacing study in the Georgia Piedmont with competition control.

Pienaar, L. V. and Shiver, B. D.

Southern Journal of Applied Forestry 17 (4): 193-196. (Nov. 1993)

NAL Call #: SD1.S63; *ISSN:* 0148-4419 [SJAFD9]

Descriptors: pinus taeda/ seedlings/ stand establishment/ marginal land/ plant competition/ vegetation management/ stand density/ growth/ survival/ diameter/ volume/ plant height/ Georgia

Abstract: The study reported here provides information on the yield potential of improved loblolly pine seedlings planted on marginal agricultural cropland in the Georgia Piedmont with control of herbaceous competition. Early growth rates greatly exceed those in existing plantations established on cutover and mechanically site-prepared land in this region without additional control of competing vegetation. After 8 growing seasons, average tree height, average dbh, basal area per acre, and stem volume per acre were all influenced by planting density, but the mean annual increment of merchantable volume (trees 4.0 in. dbh and bigger to a 2.0 in. top diameter) at age 8 yr, for planting densities of 400 to 1000 trees/ac, was 230 ft³, or approximately 3 cords/ac/yr. This is more than twice the average growth rate in this region of cutover and mechanically site-prepared loblolly plantations without additional vegetation control. These results should be of particular interest to prospective participants in the Conservation Reserve Program (CRP).

This citation is from AGRICOLA.

295. Economic and environmental impacts of planting flexibility and conservation compliance: Lessons from the 1985 and 1990 Farm Bills for future farm legislation.

Wu, S.; Walker, D. J.; and Brusven, M. A.

Agricultural and Resource Economics Review 26 (2): 216-228. (Oct. 1997)

NAL Call #: HD1773.A2N6; *ISSN:* 1068-2805

Descriptors: watersheds/ agricultural policy/ legislation/ economic impact/ environmental impact/ federal programs/ program participants/ conservation/ planting/ farm income/ profitability/ deficiency payments/ erosion/ farmers' attitudes/ integer programming/ Idaho/ food security act of 1985/ food, agriculture, conservation and trade act of 1990
This citation is from AGRICOLA.

296. Economic assessment of a nationwide forestry cost-share program: The case of the U.S. Forestry Incentives Program.

Ellefson, P. V. and Risbrudt, C. D.
Resource Management and Optimization 4 (2): 167-177. (1987); *ISSN:* 0142-2391
Descriptors: federal programs/ economics/ forestry/ natural resources

Abstract: Major federal natural resources program, Forestry Incentives Program, was evaluated. Program internal rate of return ranged from 8.3 percent to 10.9 percent, depending on costs included. Retention of forest practices established 8 years prior was excellent. Evaluation challenges include dispersion of programs benefits throughout rural U.S., evaluating benefits accruing many years in future (75-100 years), and multiple agency involvement in program administration.

© Cambridge Scientific Abstracts (CSA)

297. The economics of a public fund for environmental amenities: A study of CRP contracts.

Babcock, B. A.; Lakshminarayan, P. G.; Wu, J. J.; and Zilberman, D.
American Journal of Agricultural Economics 78 (4): 961-971. (Nov. 1996)
NAL Call #: 280.8-J822; *ISSN:* 0002-9092 [AJAEB]

Descriptors: amenity and recreation areas/ federal programs/ environmental protection/ land management/ land diversion/ productivity/ profitability/ Gini coefficient/ wind erosion/ water erosion/ surface water/ water quality/ habitats/ budgets/ acreage/ Conservation Reserve Program/ Lorenz curve/ environmental benefits / environmental quality

Abstract: The problem of targeting CRP purchases to buy environmental amenities under productivity and environmental heterogeneity is considered. Gini coefficients and Lorenz curves are used to measure the effectiveness of spending under alternative targeting criteria. The environmental benefits considered are water erosion, wind erosion, surface water quality, and wildlife habitat. The three alternative targeting criteria examined include purchasing land according to (i) the benefit-to-cost ratio, (ii) the level of benefits, and (iii) the level of cost. Results indicate that the degree of variability

and correlation determine the extent to which suboptimal targeting achieves a significant portion of available environmental benefits.
This citation is from AGRICOLA.

298. Effects of CRP on windbreak planting.

Bratton, J. and Hoefler, P.
Proceedings of the Society of American Foresters National Convention: 195-198. (1988)
NAL Call #: SD143.S64; *ISSN:* 0899-370X.
Notes: "Economic and Social Development: A Role for Forests and Forestry Professionals," October 18-21, 1987, Minneapolis, Minnesota.
Descriptors: windbreaks/ plant establishment/ programs/ conservation areas/ Conservation Reserve Program
This citation is from AGRICOLA.

299. The effects of different production systems, technology mixes, and farming practices on farm size and communities: Implications for the Conservation Reserve Program.

Flora, J. L. and Flora, C. B.
In: General Technical Report RM.
Fort Collins, Colo.: Rocky Mountain Forest and Range Experiment Station, 1988; pp. 75-83.
Notes: Report Series *ISSN:* 0277-5786; Proceedings of a Symposium on "Impacts of the Conservation Reserve Program in the Great Plains," held Sept 16-18, 1987, Denver, Colorado. Includes references.
NAL Call #: aSD11.A42
Descriptors: rural communities/ farming/ economic impact/ farm size/ farming systems/ resource conservation/ soil conservation/ erosion control/ programs/ northern plains states of USA/ southern plains states of USA/ community vitality / Conservation Reserve Program
This citation is from AGRICOLA.

300. Effects of emergency haying on vegetative characteristics within selected Conservation Reserve Program fields in the northern Great Plains.

Allen, A. W.; Cade, B. S.; and Vandever, M. W.
Journal of Soil and Water Conservation 56 (2): 120-125. (2001)
NAL Call #: 56.8-J822; *ISSN:* 0022-4561 [JSWCA3]
Descriptors: land banks/ grasslands/ haymaking/ vegetation/ botanical composition/ grasses/ medicago sativa/ legumes/ weeds/ nature conservation/ North Dakota/ South Dakota
This citation is from AGRICOLA.

301. Effects of grazing and haying on arthropod diversity in North Dakota Conservation Reserve Program grasslands.

Hoernemann, C. K.; Johnson, P. J.; and Higgins, K. F.

Proceedings of the South Dakota Academy of Science 80: 283-308. (2001); ISSN: 0096-378X

Descriptors: Species diversity/ Agricultural practices/ Grazing/ Catching methods/ Formicidae/ Diplopoda/ Hymenoptera/ Coleoptera/ Diptera/ Ants/ Populations & general ecology

Abstract: A study of arthropod populations in North Dakota CRP grasslands was conducted to determine the impact of grazing and haying management practices on the arthropod fauna. Four sampling methods were used to collect arthropods: flight intercept traps, pitfall traps, sweep net, and soil samples. The three study sites occurred in Bowman, Ward, and Stutsman counties, North Dakota. Each site consisted of three pastures under a twice-over rotation grazed system, one pasture grazed seasonlong, a hayed field, and an idle area which served as a control. Shannon's Index showed there were no significant differences in diversity among pastures or county sites. Correspondence analysis (COA) showed Diplopoda (millipedes) and Formicidae (ants) were correlated to idle and hayed treatments in which both groups had a higher mean abundance. Stutsman County had the highest mean abundance of millipedes. Two beetle families, Elateridae (click beetles) and Curculionidae (weevils), showed a trend toward the idle area from COA, but neither group had a significantly higher mean abundance in idle areas. Ward County had the highest mean abundance of both click beetles and weevils. Miridae (plant bugs) showed a strong trend to hayed fields where they had a significantly higher mean abundance. A significantly higher mean abundance of plant bugs was found in Bowman County. Acrididae (grasshoppers) were found equally abundant in all pasture types in 1995, but fewer were found in idle areas in 1996. The lowest mean abundance of grasshoppers was collected in Ward County. Grasshopper densities did not reach threatening levels in either year of this study. Based on the overall results grazing and haying appear to be viable options for post-contract uses of CRP lands with regard to management of arthropod populations. © Cambridge Scientific Abstracts (CSA)

302. Environmental quality incentives program as part of the Federal Agriculture Improvement and Reform Act (The 1996 Farm Bill): Environmental risk assessment final.

United States. Dept. of Agriculture.

Washington, D.C.: U.S. Dept. of Agriculture; v, 151, A-W p.: ill., maps. (1997)

Notes: Cover title. "February 11, 1997." Includes bibliographical references (p. A-C).

NAL Call #: aTD171.E58-1997

Descriptors: United States---Federal---Agriculture Improvement and Reform Act of 1996/ Environmental protection---United States/ Environmental policy---United States/ Environmental quality/ Environmental law---United States/ Environmental risk assessment---United States/ Risk assessment/ ORACBA/ methodology/ ecology

This citation is from AGRICOLA.

303. Establishing clovers on Conservation Reserve Program land.

Rasnake, M. and Lacefield, G.

In: Proceedings of the American Forage and Grassland Council. (Held 8 Mar 1998-10 Mar 1998 at Indianapolis, Indiana.); Vol. 7.

Georgetown, Tex.: American Forage and Grassland Council; pp. 64-65; 1998.

NAL Call #: SB193.F59

Descriptors: trifolium pratense/ crop establishment/ Kentucky

This citation is from AGRICOLA.

304. Establishment of native and introduced range plants in the Central Great Plains.

McGinnies, W. J. and Hassell, W. G.

In: General Technical Report RM.

Fort Collins, Colo.: Rocky Mountain Forest and Range Experiment Station, 1988; pp. 35-41.

Notes: Report Series ISSN: 0277-5786; Proceedings of a Symposium on "Impacts of the Conservation Reserve Program in the Great Plains," held Sept 16-18, 1987, Denver, Colorado. Includes references.

NAL Call #: aSD11.A42

Descriptors: replanting/ grasses/ sowing/ seedbed preparation/ environmental factors/ Colorado/ Kansas/ Nebraska/ Wyoming/ Conservation Reserve Program

This citation is from AGRICOLA.

305. Establishment of shrubs and forbs in the Southern Plains region.

Ueckert, D. N.

In: General Technical Report RM.

Fort Collins, Colo.: Rocky Mountain Forest and Range Experiment Station, 1988; pp. 47-51.

Notes: Report Series ISSN: 0277-5786; Proceedings of a Symposium on "Impacts of the Conservation Reserve Program in the Great Plains," held Sept 16-18, 1987, Denver, Colorado. Includes references.

NAL Call #: aSD11.A42

Descriptors: revegetation/ shrubs/ grasses/ replanting/ establishment/ southern plains states of USA

This citation is from AGRICOLA.

306. Evaluating Nonpoint Pollution Policy Using a Tightly Coupled Spatial Decision Support System.

Bennett, D. A. and Vitale, A. J.

Environmental Management 27 (6): 825-836. (2001)

NAL Call #: HC79.E5E5; ISSN: 0364-152X

Descriptors: Agriculture/ Pollution control/ Policies/ Soil erosion/ Sediment transport/ Land use/ Legislation/ Nonpoint pollution/ Decision support systems/ Water pollution control/ Government regulations/ United States/ Illinois/ Cypress Creek/ Nonpoint Pollution Sources/ Environmental Quality/ Erosion/ Land Management/ Prevention and control/ Environmental action/ Water quality control

Abstract: Policy makers often must rely on the cumulative impact of independent actions taken by local landowners to achieve environmental goals. The connection between policy, regulation, and local action, however, is often not well understood and, thus, the impact of proposed policies may be difficult to predict. In this study we evaluate the effectiveness of alternative policy scenarios for agricultural set aside programs (e.g., the Conservation Reserve Program administered by the United States Department of Agriculture) in reducing nonpoint pollution. Two alternative policy scenarios are developed and analyzed; one based on the erodibility index (detachment), the other sediment yield (transport). An estimate of the cumulative impact of associated land use change on nonpoint pollution is made using the AGNPS distributed parameter watershed model. This work is completed within the Cypress Creek watershed in southern Illinois. An analysis of the resulting data suggests that the most efficacious regulatory strategy for achieving nonpoint water pollution goals depends, in part, on place-specific land use patterns. This conclusion provides a solid argument for place-based regulatory strategies. © Cambridge Scientific Abstracts (CSA)

307. Evaluating soil properties of CRP land using remote sensing and GIS in Finney County, Kansas.

Wu, J.; Nellis, M. D.; Ransom, M. D.; Price, K. P.; and Egbert, S. L.

Journal of Soil and Water Conservation 52 (5):

352-358. (Sept. 1997-Oct. 1997)

NAL Call #: 56.8 J822; ISSN: 0022-4561

Descriptors: United States, Kansas, Finney County/ Remote Sensing/ Geographic Information Systems/ Evaluation/ Soil Properties/ Soil Erosion/ Land Use/ CRP/ NRCS/ Watershed protection

Abstract: The Conservation Reserve Program (CRP) began in 1986 with the primary purpose of reducing soil erosion. It also was intended to help the development of sustainable agriculture and associated environmental harmony. However, its effectiveness has been questioned because of the large costs and extensive staff required to conduct the program. The objectives of our study were to test

procedures for integrating remote sensing and geographic information systems (GIS) techniques to evaluate the present CRP in terms of its main goal, and to give recommendations for the future of the program in Finney County, Kansas. Three seasonal Landsat Thematic Mapper (TM) images were used to derive the land-use/land cover (LULC) map. This information was incorporated with spatial dimensions of soil surface horizon thickness, surface horizon texture, soil family, soil subgroup, and soil erodibility index (EI), all of which were extracted or calculated from the Natural Resources Conservation Service (NRCS) soil survey geographic (SSURGO) data base. With GIS techniques, calculation of EI was more efficient and the value was more accurate than that calculated by hand. We found the average EI of the county to be 20, with the highest EI of 77 in the southwest portion of the study area. CRP land had higher soil fertility and a lower EI than land currently used for farming; therefore, the CRP for this county did not necessarily include the lands most susceptible to erosion. We suggest continuing the CRP program in Finney County, because the soils are generally at serious risk of erosion. We also suggest modifying the eligibility rules of the program in order to target the most environmentally sensitive lands.

© Cambridge Scientific Abstracts (CSA)

308. Evaluating the cost effectiveness of land retirement programs.

Khanna, M.; Yang, W.; Farnsworth, R.; and Onal, H.

Selected papers from the annual meeting of the American Agricultural Economics Association (2002)

NAL Call #: HD1405-.A44.

Notes: Supplemental online access through <http://agecon.lib.umn.edu>. Meeting held July 28-31, 2002, in Long Beach, California. Includes references.

Descriptors: land diversion/ land use/ cost benefit analysis/ cost effectiveness analysis/ watersheds/ environmental impact/ mathematical models/ program evaluation/ Illinois/ Lower Sangamon Watershed/ Cass County, Illinois/ Conservation Reserve Enhancement Program

This citation is from AGRICOLA.

309. Factors associated with loblolly pine mortality on former agricultural sites in the Conservation Reserve Program.

Mitchell, R. J.; Runion, G. B.; Kelley, W. D.; Gjerstad, D. H.; and Brewer, C. H.

Journal of Soil and Water Conservation 46 (4): 306-311. (July 1991-Aug. 1991)

NAL Call #: 56.8-J822; ISSN: 0022-4561 [JSWCA3]

Descriptors: pinus taeda/ seedlings/ mortality/ sulfometuron/ phytotoxicity/ fungal diseases/ insect pests/ plant parasitic nematodes/ carbofuran/ herbicide residues/ land use/ agricultural land/ afforestation/ erosion control/ Georgia

This citation is from AGRICOLA.

310. Farm bill environmental program may threaten native prairie habitat.

Baker, B.

Bioscience 50 (5): 400. (May 2000)

NAL Call #: 500-Am322A; ISSN: 0006-3568

[BISNAS]

Descriptors: federal programs/ land management/ prairies/ environmental policy/ United States/

Conservation Reserve Program

This citation is from AGRICOLA.

311. A farm program with incentives to do good.

Reichelderfer, K.

In: Yearbook of Agriculture; Washington, D.C.: U.S. Department of Agriculture, 1987.

pp. 267-271. ill., maps.

Notes: ISSN: 0886-7690

NAL Call #: 1-AG84Y

Descriptors: conservation/ farmers/ farms/ erosion/ crops/ wetlands/ United States/ Conservation

Reserve Program

This citation is from AGRICOLA.

312. Federal and State Forestry Cost-Share Assistance Programs: Structure, Accomplishments, and Future Outlook.

Haines, T.

New Orleans, LA: Southern Forest Experiment Station; FSRPSO295; PB96152251XSP, 1995. 21 p.

Notes: Forest Service research paper SO295

http://216.48.37.129/pubs/rp/rp_so295.pdf

Descriptors: Structural timber/ State government/ National government/ Conservation/ Planting/ Harvesting/ Productivity/ Revenue/ Financing/ Forestry management/ Forestry/ Cost sharing/ Government policies/ NIPF/ Nonindustrial private forest/ NIPF lands/ Private land/ Natural resources and earth sciences/ Forestry/ Natural resource management/ Problem solving information for state and local governments/ Environment/ Urban and regional technology and development/ Environmental management and planning

Abstract: Cost-share assistance programs have been an effective policy mechanism for increasing productivity on nonindustrial private forest (NIPF) lands. In light of reduced harvests from Federal lands, timber productivity on these lands has become increasingly important to ensure sufficient timber supplies in the future. Productivity of other forest resources has also been enhanced through these programs. Four Federal programs, the Forestry Incentives Program, the Agricultural Conservation Program, the Stewardship Incentives program, and the Conservation Reserve Program, provided cost-share assistance for tree planting on 467,000 acres in 1993. During the course of this study, the provisions of the individual State programs, funding levels, accomplishments, and outlook for continuation or expansion, were examined. Federal programs were

reviewed as well, with respect to their interaction with State-level programs. The results of the study are presented in this paper.

313. Forestation and the CRP.

Mixon, J. and Thompson, L.

Journal of Soil and Water Conservation 44 (5): 437.

(Sept. 1989-Oct. 1989)

NAL Call #: 56.8-J822; ISSN: 0022-4561 [JSWCA3]

Descriptors: afforestation/ soil conservation

This citation is from AGRICOLA.

314. The future of Alabama's CRP grasslands: AAES study examines prospective uses of CRP grasslands in the Black Belt.

Goodman, B.; Miller, M.; Gimenez, D.; Milam, B.;

Flynn, K.; and Best, T.

Highlights of Agricultural Research (Alabama Agricultural Experiment Station) 42 (4): 19-20.

(Winter 1995)

NAL Call #: 100-AI1H; ISSN: 0018-1668 [HARAAS]

Descriptors: grasslands/ conservation areas/ erosion control/ program participants/ production possibilities/ hunting/ multiple land use/ landowners/ regional surveys/ demography/ Alabama/ Conservation Reserve Program

This citation is from AGRICOLA.

315. Future of the Conservation Reserve Program: Joint hearing before the Subcommittee on Environment, Credit, and Rural Development of the Committee on Agriculture, House of Representatives, and the Subcommittee on Agricultural Research, Conservation, Forestry, and General Legislation of the Committee on Agriculture, Nutrition, and Forestry, U.S. Senate, One Hundred Third Congress, second session, September 1, 1994, Aberdeen, SD.

United States. Congress. House. Committee on Agriculture. Subcommittee on Environment, Credit and Rural Development. United States. Congress. Senate. Committee on Agriculture Nutrition and Forestry. Subcommittee on Agricultural Research Conservation Forestry and General Legislation.

Washington: U.S. G.P.O.; vi, 192 p.: ill., maps. (1995)

Notes: Distributed to some depository libraries in microfiche. Shipping list no.: 95-0090-P. "Serial no. 103-92." Includes bibliographical references (p. 117). SUDOCs: Y 4.AG 8/1:103-92.

NAL Call #: KF27-.A3338-1995; ISBN: 0160468345

Descriptors: Conservation Reserve Program U.S./ Soil conservation---Economic aspects---United States/ Agricultural subsidies---United States/ Agriculture and state---United States

This citation is from AGRICOLA.

316. Future use of Conservation Reserve Program acres: A national survey of farm owners and operators.

Osborn, C. Tim.; Schnepf, Max; Keim, Russ.; and Soil and Water Conservation Society (U.S.). Ankeny, Iowa: Soil and Water Conservation Society; 47 p.: ill. (1994)

Notes: Includes bibliographical references (p. 29).

NAL Call #: S624.A1O87--1994

Descriptors: Conservation Reserve Program---United States/ Agricultural conservation---United States/ Land use---Rural---United States/ Agricultural contracts---United States

This citation is from AGRICOLA.

317. GIS-based spatial indices for identification of potential phosphorous export at watershed scale.

Giasson, E.; Bryant, R. B.; and DeGloria, S. D.

Journal of Soil and Water Conservation 57 (6):

373-381. (2002)

NAL Call #: 56.8 J822; *ISSN:* 0022-4561

This citation is provided courtesy of CAB International/CABI Publishing.

318. Grazing Lands and the Conservation Reserve Program.

Winrock International Institute for Agricultural Development.

Morrilton, AR: Winrock International, 1988. 8 p.

Notes: Original Title: "Grazing Lands and the Conservation Reserve Program: executive summary: third forum, Harpers Ferry, WV, October 11-13, 1988."

NAL Call #: HD241.G73

Descriptors: Grazing Lands and the Conservation Reserve Program/ Grazing districts---United States/ Agricultural conservation---United States

This citation is from AGRICOLA.

319. Grazing warm-season grasses on post-contract CRP land in Colorado.

Hart, Charles R. and Colorado State University. Cooperative Extension Service.

Fort Collins, Colo.: Colorado State University Cooperative Extension; XCM-194, 1996.

47 p. Bulletin.

Notes: "January 1996." Includes bibliographical references (p. 29).

NAL Call #: HD241.G75--1996

Descriptors: Conservation Reserve Program---United States/ Grazing---Colorado/ Grasses---Colorado---Growth

This citation is from AGRICOLA.

320. Growth responses of warm-season tallgrasses to dormant-season management.

Schacht, W. H.; Smart, A. J.; Anderson, B. E.; Moser, L. E.; and Rasby, R.

Journal of Range Management 51 (4): 442-446. (July 1998)

NAL Call #: 60.18-J82; *ISSN:* 0022-409X [JRMGAQ]

Descriptors: panicum virgatum/ andropogon gerardii/ schizachyrium scoparium/ tillering/ harvesting date/ prescribed burning/ mowing/ grazing intensity/ stocking rate/ grassland improvement/ plant height/ growth stages/ Nebraska

Abstract: A study on Conservation Reserve Program (CRP) land was established in southeastern Nebraska to determine the effect of dormant-season management on subsequent-year growth rates and yields of tallgrasses. The purpose of the management practices was removal of standing dead material and litter that negatively impact plant growth and grazing efficiency. Treatments consisted of a control with no residue manipulation and 5 residue manipulation practices including (1) October shredding and leaving residue; (2) October haying; (3) October intensive grazing; (4) March intensive grazing; and (5) spring prescribed burning. The study was conducted in 1994/95 and 1995/96 on a switchgrass (*Panicum virgatum* L.) monoculture and mixed stand of warm-season tallgrasses dominated by big bluestem (*Andropogon gerardii* Vitman) and little bluestem [*Schizachyrium scoparium* (Michx.) Nash]. The manipulation treatments effectively removed standing dead material without reducing yields in the growing season following application. Marked switchgrass tillers on the control plots increased ($P < 0.1$) in height at a more rapid rate than switchgrass on other treatments until late summer in both years. Rate of morphological development was similar ($P > 0.1$) for all treatments in 1995 and 1996. Rate of height increase and morphological development in big and little bluestem on the mixed grass site generally was comparable or slower on the manipulation treatments than the control in both years; however, big and little bluestem tillers grew relatively rapidly at the end of the 1995 growing season. Because the manipulation treatments generally did not increase tiller growth rates of the dominant grass species, potential harvest dates would be similar to those of untreated areas. This citation is from AGRICOLA.

321. Hand planting versus machine planting of bottomland red oaks on former agricultural fields in Louisiana's Mississippi Alluvial Plain: Sixth-year results.

Michalek AJ; Lockhart BR; Dean TJ; Keeland BD; and McCoy JW

In: General Technical Report, Southern Research Station, SRS 48/ Outcalt KW; Outcalt PA; and Tucker RB, 2002. pp. 352-357.

Notes: Conference: Proceedings of the Eleventh Biennial Southern Silvicultural Research Conference, Knoxville, Tennessee, 20-22 March 2001.

This citation is provided courtesy of CAB International/CABI Publishing.

322. Herbaceous energy crop production feasibility using Conservation Reserve Program acreage.

Nelson, R. G.; Langemeier, M. R.; and Ohlenbusch, P. D.

Proceedings of the Annual Conference - American Solar Energy Society: 326-331. (1994)

NAL Call #: TJ810.A54; *ISSN:* 1062-4910.

Notes: Meeting held June 25-30, 1994, San Jose, California. Includes references.

Descriptors: fuel crops/ tripsacum dactyloides/ andropogon gerardii/ sorghastrum nutans/ bioenergy/ energy cost of production/ crop production/ nitrogen fertilizers/ transport/ pyrolysis/ feasibility/ economic analysis/ federal programs/ United States/ Conservation Reserve Program
This citation is from AGRICOLA.

323. Historical development of native vegetation on the Great Plains.

Stubbendieck, J.

In: General Technical Report RM.

Fort Collins, Colo.: Rocky Mountain Forest and Range Experiment Station, 1988; pp. 21-28.

Notes: Report Series ISSN: 0277-5786; Proceedings of a Symposium on "Impacts of the Conservation Reserve Program in the Great Plains," held Sept 16-18, 1987, Denver, Colorado. Includes references.

NAL Call #: aSD11.A42

Descriptors: vegetation types/ botanical composition/ environmental factors/ history/ northern plains states of USA/ southern plains states of USA
This citation is from AGRICOLA.

324. History of cropland set aside programs in the Great Plains.

Bedenbaugh, E. J.

In: General Technical Report RM.

Fort Collins, Colo.: Rocky Mountain Forest and Range Experiment Station, 1988; pp. 14-17.

Notes: Report Series ISSN: 0277-5786; Proceedings of a Symposium on "Impacts of the Conservation Reserve Program in the Great Plains," held Sept 16-18, 1987, Denver, Colorado.

NAL Call #: aSD11.A42

Descriptors: resource conservation/ soil conservation/ land diversion/ history/ northern plains states of USA/ southern plains states of USA/ food security act of 1985/ Conservation Reserve Program
This citation is from AGRICOLA.

325. History of grassland plowing and grass planting on the Great Plains.

Laycock, W. A.

In: General Technical Report RM.

Fort Collins, Colo.: Rocky Mountain Forest and Range Experiment Station, 1988; pp. 3-8.

Notes: Report Series ISSN: 0277-5786; Proceedings of a Symposium on "Impacts of the Conservation Reserve Program in the Great Plains," held Sept 16-18, 1987, Denver, Colorado. Includes references.

NAL Call #: aSD11.A42

Descriptors: grasslands/ land use/ plowing/ revegetation/ resource conservation/ history/ northern plains states of USA/ southern plains states of USA
This citation is from AGRICOLA.

326. How to determine when your Conservation Reserve Program (CRP) pine plantation is ready to thin.

Londo AJ; Traugott TA; Dicke SG; and Roberts SD

In: General Technical Report, Southern Research Station, SRS 48/ Outcalt KW; Outcalt PA; and Tucker RB USDA Forest Service, 2002. pp. 159-162.

Notes: Conference: Proceedings of the Eleventh Biennial Southern Silvicultural Research Conference, Knoxville, Tennessee, 20-22 March 2001.

This citation is provided courtesy of CAB International/CABI Publishing.

327. Impact of leafy spurge on post-Conservation Reserve Program land.

Hirsch, S. A. and Leitch, J. A.

Journal of Range Management 51 (6): 614-620. (Nov. 1998)

NAL Call #: 60.18-J82; *ISSN:* 0022-409X [JRMGAQ]

Descriptors: euphorbia esula/ conservation areas/ weed control/ species diversity/ economic impact/ grazing/ carrying capacity/ wildlife/ North Dakota
Abstract: Leafy spurge (*Euphorbia esula* L.), a noxious weed infests some of the 1.2 million hectares of Conservation Reserve Program (CRP) land in North Dakota. Once established a leafy spurge monoculture will reduce expected CRP benefits and impact returns to some post-CRP land uses. The study estimated statewide direct economic impacts of about \$351,000 on post-CRP land maintained in vegetative cover, \$1.118 million on post-CRP grazing land, and negligible (assumed \$0) on post-CRP cropland, for a total of \$1.469 million. Total annual

direct and secondary economic impacts to North Dakota's economy were estimated to be \$4.665 million, which would support about 57 jobs. This citation is from AGRICOLA.

328. Impact of post-CRP alternatives on cotton production in the Texas High Plains.

Johnson, P.; Segarra, E.; and Ervin, R. T. *Proceedings - Beltwide Cotton Conferences* 1: 500-502. (1994)
 NAL Call #: SB249.N6; ISSN: 1059-2644.
 Notes: Meeting held January 5-8, San Diego, California. Includes references.
 Descriptors: cotton/ gossypium/ economic analysis/ crop production/ land policy/ erosion/ soil conservation/ Texas/ Conservation Reserve Program
 This citation is from AGRICOLA.

329. Implications of changes in the regional ecology of the Great Plains.

Joyce, L. A. and Skold, M. D.
 In: General Technical Report RM. Fort Collins, Colo.: Rocky Mountain Forest and Range Experiment Station, 1988; pp. 115-127.
 Notes: Report Series ISSN: 0277-5786; Proceedings of a Symposium on "Impacts of the Conservation Reserve Program in the Great Plains," held Sept 16-18, 1987, Denver, Colorado. Includes references.
 NAL Call #: aSD11.A42
 Descriptors: resource conservation/ soil conservation/ erosion control/ land use/ programs/ USDA/ landscape/ northern plains states of USA/ southern plains states of USA/ Conservation Reserve Program
 This citation is from AGRICOLA.

330. Insects as indicators of land use in three ecoregions in the prairie pothole region.

Anderson, D. J. and Vondracek, B. *Wetlands* 19 (3): 648-664. (1999)
 NAL Call #: QH75.A1W47; ISSN: 0277-5212
 Descriptors: Prairies / Agricultural practices/ Indicator species/ Light traps/ Species diversity/ Species richness/ United States, North Dakota/ Land Use/ Invertebrates/ Insects/ Wetlands/ Agriculture/ Ecological Effects/ Insecta/ Populations & general ecology/ Effects on water of human nonwater activities
 Abstract: We sampled populations of insects in the prairie pothole region of North Dakota, USA, to determine whether relationships existed between community- or taxon-level indicators and 11 land-use types. Our goal was to determine if agricultural impacts were reflected in measurable differences for insect indicators: abundance, taxa richness, and diversity. Insects were sampled with light traps at 126 wetland basins in three ecoregions. Sampling was conducted three times each year during the spring and early summer of 1995 and 1996. Sites were

selected based on the proportion of cropland to grassland, hayland, and Conservation Reserve Program land surrounding wetland basins at 50 and 400 m radii. Other land-use types included in our analyses were woodland, roadways, and five wetland types: permanent, semi-permanent, seasonal, temporary, and riverine. In both years, taxa richness, abundance, and diversity were greater for the second (June) and third (July) sampling periods than for the first period (May), and indicators were greater in the Drift Plain and Red River Valley ecoregions than in the Missouri Coteau ecoregion. Our analyses indicated several significant associations between insect indicators and land-use types; however, *r* super(2) values were generally low. Much more of the variance in insect measures was explained by temperature, seasonal, and ecoregion effects. Several associations were significant within individual ecoregions (i.e., abundance of aquatic insects, Caenidae, Scarabaeidae, and Lepidoptera and number of Ephemeroptera families). However, no indicators were found in common for all three ecoregions. Several significant associations with land use were identified across all sites (i.e., all ecoregions combined). A small number of the significant relationships found across all sites were related to agricultural land use, and several indicated a negative relationship with grasslands. However, we observed several positive relationships between our insect indicators and riverine wetlands across sites and in the Red River Valley ecoregion for both years and spatial scales (i.e., the abundance of Caenidae, Scarabaeidae, Ceratopogonidae, Hydropsychidae, and Hydroptilidae).

© Cambridge Scientific Abstracts (CSA)

331. Landscape cover type and pattern dynamics in fragmented southern Great Plains grasslands, USA.

Coppedge, B. R.; Engle, D. M.; Fuhlendorf, S. D.; Masters, R. E.; and Gregory, M. S. *Landscape Ecology* 16 (8): 677-690. (2001)
 NAL Call #: QH541.15.L35L36; ISSN: 0921-2973
 This citation is provided courtesy of CAB International/CABI Publishing.

332. Local socioeconomic impacts of the Conservation Reserve Program.

Hodur NM; Leistriz FL; and Bangsund DA
 Fargo, N.D.: Department of Agribusiness and Applied Economics, North Dakota State University; Agribusiness and Applied Economics Report (AAER) 476, 2002. 16 p.
 This citation is provided courtesy of CAB International/CABI Publishing.

333. Long-term harmful effects of crested wheatgrass on Great Plains grassland ecosystems.

Lesica, P. and DeLuca, T. H.

Journal of Soil and Water Conservation 51 (5): 408-409. (Oct. 1996)

NAL Call #: 56.8 J822; ISSN: 0022-4561

Descriptors: ecological effects/ species diversity/ vegetation/ soil erosion/ erosion control/ United States, Great Plains/ exotic species/ crested wheatgrass/ Watershed protection

Abstract: Many Eurasian grasses have been intentionally introduced throughout temperate North America, primarily for hay and pasture. The most commonly planted exotic grass in western North America is crested wheatgrass (*Agropyron cristatum*, A. desertorum). There are between 15 and 26 million acres of crested wheatgrass on this continent. The conversion of native prairie to crested wheatgrass primarily occurred after the drought of the late 1920s and 1930s when large areas of marginal cropland were abandoned and then seeded with non-native grasses to reduce soil erosion potential. Today, crested wheatgrass continues to be planted over large areas of the Northern Great Plains. Since 1985 several million acres of crested wheatgrass have been planted on idled cropland as part of the Conservation Reserve Program.

© Cambridge Scientific Abstracts (CSA)

334. A look at CRP land: Returning to cotton production.

Johnson, J.; McGregor, K.; and Dabney, S.

Proceedings - Beltwide Cotton Conferences 2: 1351-1352. (1996)

NAL Call #: SB249.N6; ISSN: 1059-2644

This citation is from AGRICOLA.

335. Maximizing the environmental benefits per dollar expended: An economic interpretation and review of agricultural environmental benefits and costs.

Poe, Gregory L. and New York State College of Agriculture and Life Sciences. Dept. of Agricultural, Resource and Managerial Economics.

Ithaca, NY: Dept. of Agricultural, Resource, and Managerial Economics, College of Agriculture and Life Sciences, Cornell University; 45 p. (1997)

Notes: Cover title. "July 1997." Includes bibliographical references (p. 32-42).

NAL Call #: HD1775.N7-E25-no.-97-10

<http://nysdocs.nysed.gov/scandocs1.asp?oclc=37497244>

Descriptors: Agriculture---Economic aspects/ Agriculture---Environmental aspects/ Environmental protection---Cost effectiveness

This citation is from AGRICOLA.

336. Minnesota wood energy scale-up project 1994 establishment cost data.

Downing, M.; Pierce, R.; and Kroll, T.

Oak Ridge, Tenn. Oak Ridge National Laboratory; ORNL TM12914, 1996. 58 p.

Notes: DE96010091XSP; Sponsored by Department of Energy, Washington, DC.; Contract: AC0596OR22464

Descriptors: Economic Analysis/ Energy Source Development/ Socio Economic Factors/ Biomass Plantations/ Minnesota/ Poplars/ Wood Fuels/ Business and economics/ Energy reserves/ Energy policies, regulations and studies/ Fuels

Abstract: The Minnesota Wood Energy Scale-up Project began in late 1993 with the first trees planted in the spring of 1994. The purpose of the project is to track and monitor economic costs of planting, maintaining and monitoring larger scale commercial plantings. For 15 years, smaller scale research plantings of hybrid poplar have been used to screen for promising, high-yielding poplar clones. In this project 1000 acres of hybrid poplar trees were planted on Conservation Reserve Program (CRP) land near Alexandria, Minnesota in 1994. The fourteen landowners involved re-contracted with the CRP for five-year extensions of their existing 10-year contracts. These extended contracts will expire in 2001, when the plantings are 7 years old. The end use for the trees planted in the Minnesota Wood Energy Scale-up Project is undetermined. They will belong to the owner of the land on which they are planted. There are no current contracts in place for the wood these trees are projected to supply. The structure of the wood industry in the Minnesota has changed drastically over the past 5 years. Stumpage values for fiber have risen to more than \$20 per cord in some areas raising the possibility that these trees could be used for fiber rather than energy. Several legislative mandates have forced the State of Minnesota to pursue renewable energy including biomass energy. These mandates, a potential need for an additional 1700 MW of power by 2008 by Northern States Power, and agricultural policies will all affect development of energy markets for wood produced much like agricultural crops. There has been a tremendous amount of local and international interest in the project. Contractual negotiations between area landowners, the CRP, a local Resource Conservation and Development District, the Minnesota Department of Natural Resources and others are currently underway for additional planting of 1000 acres in spring 1995.

337. National Survey of Conservation Reserve Program (CRP) Participants on Environmental Effects, Wildlife Issues, and Vegetation Management on Program Lands.

Allen, A. W. and Vandever, M. W.
 Fort Collins, CO: U.S. Geological Survey, Fort Collins Science Center; USGS BSR 2003-001, 2003. 56 p.
Notes: ADA418145XSP; Biological Sciences Report; Prepared in cooperation with Johnson Controls World Services, Inc., Fort Collins, CO 80526-8118.
<http://www.fort.usgs.gov/products/publications/21075/21075.pdf>

Descriptors: Ground water/ Air quality/ Soil erosion/ Wildlife/ Plants Botany/ Fire hazards/ Surveys/ Long range Time/ Environmental impact/ Land use/ Conservation Reserve Program/ Natural resources and earth sciences/ Agriculture and food/ Agricultural equipment facilities and operations/ Medicine and biology/ Ecology/ Environmental pollution and control
Abstract: A national survey of Conservation Reserve Program (CRP) contractees was completed to obtain information about environmental and social effects of the program on participants, farms, and communities. Of interest were observations concerning wildlife, attitudes about long-term management of program lands, and effectiveness of U.S. Department of Agriculture (USDA) assistance in relation to these issues. Surveys were delivered to 2,189 CRP participants with a resultant response rate of 64.5%. Retired farmers represented the largest category of respondents (52%). Enhanced control of soil erosion was the leading benefit of the CRP reported. Over 73% of respondents observed increased numbers of wildlife associated with lands enrolled in the program. The majority of respondents reported CRP benefits, including increased quality of surface and ground waters, improved air quality, control of drifting snow, and elevated opportunities to hunt or simply observe wildlife as part of daily activities, income stability, improved scenic quality of farms and landscapes, and potential increases in property values and future incomes also were seen as program benefits. Negative aspects, reported by a smaller number of respondents, included seeing the CRP as a source of weeds, fire hazard, and attracting unwanted requests for trespass. Over 75% of respondents believed CRP benefits to wildlife were important. A majority of respondents (82%) believed the amount of assistance furnished by USDA related to planning and maintaining wildlife habitat-associated with CRP lands was appropriate. Nearly 51% of respondents would accept incorporation of periodic management of vegetation into long-term management of CRP lands to maintain quality of wildlife habitats. Provision of funds to address additional costs and changes in CRP regulations would be required to maximize long-term management of program lands.

338. North Dakota's CRP Grazing and Haying Demonstration Project.

Printz, J. L.
Rangelands 15 (4): 163-165. (Aug. 1993)
NAL Call #: SF85.A1R32; *ISSN:* 0190-0528
Descriptors: soil conservation/ grazing/ hay/ grazing systems/ stocking rate/ herbage/ North Dakota/ Conservation Reserve Program
 This citation is from AGRICOLA.

339. Noxious weed control in Conservation Reserve Program grass stands.

Ohlenbusch, P. D.
 In: L: Cooperative Extension Service, Kansas State University, 816 (April 1990); Manhattan, Kan.: Cooperative Extension Service, Kansas State University, 1990. 4 p.
NAL Call #: 275.29-K13LE
Descriptors: weed control/ grasslands/ cover crops/ herbicides/ Kansas
 This citation is from AGRICOLA.

340. Overwintering by the boll weevil (Coleoptera: Curculionidae) in Conservation Reserve Program grasses on the Texas High Plains.

Carroll, S. C.; Rummel, D. R.; and Segarra, E.
Journal of Economic Entomology 86 (2): 382-393. (Apr. 1993)
NAL Call #: 421-J822; *ISSN:* 0022-0493 [JEENAI]
Descriptors: anthonomus grandis/ diapause/ habitats/ overwintering/ plains/ plateaus/ survival/ conservation areas/ grasses/ Texas
Abstract: Scarcity of suitable overwintering habitat is a major obstacle to the establishment of the boll weevil, *Anthonomus grandis grandis* Boheman, in cotton-producing counties of the Texas High Plains (THP). After introduction of the Conservation Reserve Program (CRP) in 1985, a 3-yr study was conducted to investigate the overwintering potential of the boll weevil in two CRP grass habitats on the THP. Overwintering survival of the boll weevil in leaf litter of sand shinnery oak, *Quercus havardii* (Rydberg), in the Texas Rolling Plains (TRP) served as a comparison. CRP grasses provide marginal overwintering habitat when compared with sand shinnery oak leaf litter. For a given level of winter severity, total winter survival and effective emergence (emergence after approximately 15 June in the study area) were consistently lower in the CRP grasses than in sand shinnery oak leaf litter. Even with lower survival rates in THP grasses, economically damaging boll weevil infestations could follow mild winters if large diapausing populations develop in the fall. Pheromone traps located in CRP pastures on the THP indicated a relatively low level of overwintered boll weevil emergence during all three study years. This citation is from AGRICOLA.

341. Perennial wheat germ plasm lines resistant to eyespot, Cephalosporium stripe, and wheat streak mosaic.

Cox, C. M.; Murray, T. D.; and Jones, S. S.
Plant Disease 86 (9): 1043-1048. (Sept. 2002)
 NAL Call #: 1.9-P69P; ISSN: 0191-2917

Descriptors: Plant diseases/ Wheat germ/ Disease resistance/ Eye spot/ Stripe/ Streak/ Eyespot/ Wheat streak mosaic virus/ Cephalosporium gramineum/ Tapesia yallundae/ Pseudocercospora herpotrichoides/ Thinopyrum ponticum/ Thinopyrum intermedium/ Washington/ Susceptibility & virus multiplication/ General/ United States

Abstract: A perennial wheat cropping system on the Palouse Prairie of eastern Washington may provide an alternative to the Federal Conservation Reserve Program and reduce soil erosion while providing a harvestable crop for growers. Twenty-four perennial wheat germ plasm lines resulting from crosses between wheat and wheatgrass were evaluated under controlled environment conditions for resistance to Wheat streak mosaic virus (WSMV), Cephalosporium gramineum, and Tapesia yallundae (anamorph Pseudocercospora herpotrichoides var. herpotrichoides). Perennial wheat lines SS452, SS103, SS237, MT-2, and PI 550713 were resistant to all three pathogens. Eight lines (33%) were resistant to WSMV at 21 degree C and 25 degree C; AT3425 was resistant to WSMV at 21 degree C but not at 25 degree C. Thirteen lines (54%) were highly to moderately resistant to C. gramineum. Thirteen lines (54%) were resistant to T. yallundae in each experiment, but the reactions of four lines differed between experiments. The wheatgrasses Thinopyrum intermedium (PI 264770) and Thinopyrum ponticum (PI 206624) are reported as new sources of resistance to T. yallundae. Perennial wheat must have resistance to these diseases in order to be feasible as a crop in the Pacific Northwest.

© Cambridge Scientific Abstracts (CSA)

342. Pine and CRP as alternative cropland uses: An application of the southeast land allocation model.

Atwood, J. D.; English, B. C.; and Robertson, T.
Southern Journal of Agricultural Economics 21 (1): 189. (July 1989)

NAL Call #: HD101.S6; ISSN: 0081-3052
Descriptors: pines/ land use/ farmland/ crop mixtures/ south eastern states of USA

This citation is from AGRICOLA.

343. Plow: Lessons Learned From CRP - Point.
 Mitchell, J. E.

In: 50th Annual Meeting of the Society for Range Management. (Held 15 Feb 1997-20 Feb 1997 at Rapid City, SD (USA).); 1997.

Notes: Conference Sponsor: South Dakota Section of

the Society for Range Management; HQ: Society for Range Management (Denver, CO); World Meeting Number 971 0113

© Cambridge Scientific Abstracts (CSA)

344. Post-contract grassland management and winter wheat production on former CRP fields in the southern Great Plains.

Dao, T. H.; Stiegler, J. H.; Banks, J. C.; Bogle Boerngen, L.; and Adams, B.
Agronomy Journal 92 (6): 1109-1117.
 (Nov. 2000-Dec. 2000)

NAL Call #: 4-AM34P; ISSN: 0002-1962 [AGJOAT]

Descriptors: triticum aestivum/ grassland management/ abandoned land/ semiarid climate/ land management/ efficacy/ bothriochloa ischaemum/ gossypium hirsutum/ fertilizers/ application rates/ regrowth/ conservation tillage/ herbicides/ no-tillage/ land banks/ Oklahoma/ Conservation Reserve Program

Abstract: Integrated management guidelines for postcontract land use Conservation Reserve Program lands in semiarid regions are generally lacking. We determined the relative efficacy of four systems of transitional conservation practices for producing 'Old World' bluestem (OWB) (*Bothriochloa ischaemum* L.) and dryland wheat (*Triticum aestivum* L.) and cotton (*Gossypium hirsutum* L.) on former CRP fields. The sites were located on Dalhart fine sandy loam (Aridic Paleustalf) and La Casa-Aspermont clay loam (Typic Paleustoll) near Forgan and Duke, OK, respectively. Removing old growth increased cumulative OWB yields between 1994 and 1997. Applications of 67 kg N and 16.5 kg P ha⁻¹ increased yields by 0, 70, and 180% at Forgan and 290, 70, and 280% at Duke in 1995 to 1997, respectively. Removing the old dry matter and regrowth vigor also enhanced chemical suppression and killing of the grass, the performance of conservation tillage, and achieving a uniform crop stand. Early OWB suppression conserved stored water that was vital to cool-season crop production in the year the contract expired. First-year wheat yields averaged 970, 490, and 1002 kg ha⁻¹ at Forgan and 1590, 600, and 830 kg ha⁻¹ at Duke under unfavorable weather conditions (i.e., drought, late freeze) of 1995 through 1997, respectively. No-till generally produced higher yields, averaging 10 and 35% greater than conservation systems at Forgan and Duke, respectively. In variable semiarid environment, the chance of success for agronomic production decreased in the order of grass production, NT wheat, tilled wheat, and dryland cotton on former CRP lands.

This citation is from AGRICOLA.

345. Post-CRP land management and sustainable production alternatives for highly erodible lands in the Southern Great Plains.

Dao, T. H. Sustainable Agriculture Research and Education SARE research projects Southern Region. 1995. 35 p.

Notes: Author Affiliation: USDA, ARS, Conservation & Production Research Laboratory, Bushland, TX;

SARE Project Number: LS94-58

NAL Call #: S441.S8552

Descriptors: triticum aestivum/ gossypium hirsutum/ conservation tillage/ tillage/ no-tillage/ bothriochloa ischaemum/ prescribed burning/ crop density/ crop management/ land management/ federal programs/ crop yield/ Texas/ Oklahoma/ Conservation Reserve Program

This citation is from AGRICOLA.

346. RCA III influence of social trends on agricultural natural resources: Community, social capital, and conservation.

Washington D.C.: NRCS, USDA, 1997. vii, 61 p.: map; 28 cm.

NAL Call #: aS930.U6 R23 1997

Descriptors: Agriculture---Social aspects---United States/ Community development---United States/ Conservation of natural resources---United States
This citation is from AGRICOLA.

347. RCA III influence of social trends on agricultural natural resources: Property rights, conservation, and ecosystem-based assistance.

Washington, D.C.: NRCS, USDA, 1997. vii, 17 p.; 28 cm.

NAL Call #: aHD255 .R23 1997

Descriptors: Agricultural ecology---United States/ Right of property---United States/ Ecosystem management---United States

This citation is from AGRICOLA.

348. Resource conservation: Hearing before the Subcommittee on Forestry, Conservation, and Rural Revitalization of the Committee on Agriculture, Nutrition, and Forestry, United States Senate, One Hundred Fourth Congress, first session ... June 6, 1995.

United States. Congress. Senate. Committee on Agriculture, Nutrition and Forestry. Subcommittee on Forestry Conservation and Rural Revitalization.

Washington: U.S. G.P.O.; iv, 151 p.: ill.; Series: United States. Congress. Senate.

S. Hrg. 104-496. (1996)

Notes: Distributed to some depository libraries in microfiche. Shipping list no.: 97-0026-P. Includes bibliographical references. SUDOCs: Y 4.AG 8/3:S.HRG.104-496.

NAL Call #: Fiche--S-133-Y-4.AG-8/3:S.HRG.104-496-; ISBN: 0160535514

Descriptors: Conservation Reserve Program---United

States/ Conservation of natural resources---Government policy---United States/ Agriculture and state---United States

This citation is from AGRICOLA.

349. Revamped CRP growing again.

Osborn, T.

Agricultural Outlook [AO] (175): 22-25. (June 1991)

NAL Call #: aHD1751.A42; ISSN: 0099-1066

Descriptors: federal programs/ land diversion/ erosion control/ legislation/ United States/ Conservation Reserve Program/ food, agriculture, conservation and trade act of 1990

This citation is from AGRICOLA.

350. Reverting Conservation Reserve Program lands to wheat and livestock production: Effects on ground beetle (Coleoptera: Carabidae) assemblages.

French, B. W.; Elliott, N. C.; and Berberet, R. C. *Environmental Entomology* 27 (6): 1323-1335. (Dec. 1998)

NAL Call #: QL461.E532; ISSN: 0046-225X [EVETBX]

Descriptors: carabidae/ insect communities/ community ecology/ species diversity/ population density/ pastures/ conservation areas/ reserved areas/ bothriochloa bladhii/ land use/ agricultural land / triticum aestivum/ minimum tillage/ no-tillage/ livestock/ grazing/ Oklahoma/ species composition/ species abundance

Abstract: Highly erodible lands enrolled in the Conservation Reserve Program soon will revert to agricultural production. This study was designed to determine the effects of reversion of Conservation Reserve Program lands to wheat and livestock production on ground beetle assemblages. Reversion strategies included no reversion of Conservation Reserve Program grass (unmanaged bluestem), simulated grazing of Conservation Reserve Program grass (managed bluestem), minimum-tillage practices for wheat production, and no-tillage practices for wheat production. A randomized block experimental design was established with 4 replicates. More ground beetles were captured in pitfall traps in 1995 than in 1996, and abundances within years differed among reversion strategies. Of the 73 ground beetle species collected, 9 species accounted for 61.7% of total abundance. Abundances of these 9 species differed with respect to reversion strategy. Species diversity and evenness differed among the reversion strategies in 1995, but only evenness differed in 1996. Canonical correspondence analysis showed that annual and monthly variation were the predominant factors in separating ground beetle assemblages. Lack of rainfall may have accounted for a large portion of differences in abundances between years. A partial canonical correspondence analysis showed that simulated grazing and no-tillage

wheat were the predominant reversion strategies in separating ground beetle assemblages. These treatments represent disturbance levels intermediate to unmanaged bluestem and minimum-tillage wheat. This citation is from AGRICOLA.

351. Review of the Conservation Reserve Program, Conservation Reserve Enhancement Program, and other conservation matters affecting U.S. agriculture: Hearing before the Subcommittee on General Farm Commodities, Resource Conservation, and Credit of the Committee on Agriculture, House of Representatives, One Hundred Sixth Congress, second session, March 31, 2000, Mankato, MN.

United States. Congress. House. Committee on Agriculture. Subcommittee on General Farm Commodities, Resource Conservation and Credit. Washington: U.S. G.P.O.; iii, 119 p.: ill., maps. (2000)

Notes: Distributed to some depository libraries in microfiche. Shipping list no.: 2000-0275-P. "Serial no. 106-49." SUDOCs: Y 4.AG 8/1:106-49.

NAL Call #: KF27-.A3452-2000a; *ISBN:* 0160606020

Descriptors: Conservation Reserve Program---United States/ Conservation Reserve Enhancement Program---United States/ Wetland mitigation banking--Minnesota/ Wetland conservation---Minnesota/ Soil conservation---Minnesota

This citation is from AGRICOLA.

352. RIM and CRP: Two marginal cropland retirement programs.

Taff, Steven J.

St. Paul, Minn.: University of Minnesota, Institute of Agriculture, Forestry and Home Economics, 1987. 16 p.: ill.

Notes: Staff paper P, 0090-1334; P87-21.; "July 1987." Bibliography: p. 15.

NAL Call #: HD1761.A1M5-no.87-21

This citation is from AGRICOLA.

353. The role of the Conservation Reserve Program in controlling rural residential development.

Johnson, J. and Maxwell, B.

Journal of Rural Studies 17 (3): 323-332. (July 2001)

NAL Call #: HT401.J68; *ISSN:* 0743-0167

Descriptors: land use / residential areas/ rural development/ federal programs/ land policy/ land management/ prediction/ Montana/ Three Forks, Montana

Abstract: Rural population growth in the form of residential development frequently results in the loss of agricultural productive land as well as loss of adjacent open space that often characterizes rural communities. A land-use prediction model was used to determine what influence the USDA Conservation Reserve Program (CRP) may have on urban sprawl

and rural community sustainability. The model demonstrated that the projected mean rural residential growth rate was almost half the growth rate with CRP as compared to without CRP in the local land management mix. In addition, ecosystem integrity on the land surrounding a rural community was sharply increased with the introduction of CRP. However, community economics and subsequent social character of the community may have been significantly impacted by CRP. In order to partially mitigate CRP-induced community impacts we propose future CRP guidelines support the establishment of within-production field scale ecological refuges. These refuges would satisfy the conservation requirements of the program, return a level of traditional agricultural production to the land management mix, and provide the adjacent community with aesthetic and recreational amenities that are frequently associated with modern rural economies.

This citation is from AGRICOLA.

354. Russian thistle control in Conservation Reserve Program (CRP) grass plantings.

Adams, E. B. and Swan, D. G.

Research Progress Report - Western Society of Weed Science: 368. (1988)

NAL Call #: 79.9-W52R; *ISSN:* 0090-8142

Descriptors: lawns and turf/ salsola iberica/ herbicide application/ Washington

This citation is from AGRICOLA.

355. Russian wheat aphid (Homoptera : Aphididae) performance on perennial grasses.

Mowry, T. M.; Halbert, S. E.; and Pike, K. S.

Journal of Economic Entomology 88 (3): 635-639. (1995)

NAL Call #: 421 J822; *ISSN:* 0022-0493

Descriptors: grasses/ Diuraphis noxia/ Aphididae/ Homoptera/ survival/ fecundity/ host plants/ Relations to plants

Abstract: Russian wheat aphid, *Diuraphis noxia* (Kurdjumov), survival and fecundity on 25 perennial grasses in their 1st yr of growth was measured in greenhouse experiments. Thirteen grasses that had survived heading, seed set, and induced dormancy were tested for aphid host suitability of plants in their 2nd yr of growth. In general, wheatgrasses were the most suitable Russian wheat aphid hosts in both 1st- and 2nd-yr growth experiments. Siberian wheatgrass P-27 and crested wheatgrass 'Ephraim' were better hosts for the Russian wheat aphid 1 yr after establishment than in the 1st yr; however, there was no difference in host suitability between concurrently tested 1st- and 2nd-yr plants. Great Basin wildrye 'Magnar' was a less suitable host in the second year, but this perennial grass was a poor host over all plant ages. These greenhouse results support the conclusion that certain perennial grasses that are

suitable for Russian wheat aphid survival and fecundity in the 1st yr of growth remain so in second and subsequent years following establishment. For acreage set aside in the Conservation Reserve Program, it is advisable to plant perennial grasses that are poor Russian wheat aphid hosts from the outset.

© Cambridge Scientific Abstracts (CSA)

356. Selected Effects of the Conservation Reserve Program on Program Participants: A Report to Survey Respondents.

Vandever, M. W.; Allen, A. W.; and Sexton, N. R. Fort Collins, CO: U.S. Geological Survey, Fort Collins Science Center; USGSOFR02476, 2003. 30 p.

Notes: USGS Open file rept. 2476; Sponsored by Farm Service Agency, Lakewood, CO

<http://www.fort.usgs.gov/products/publications/10023/10023.pdf>

Descriptors: Surveys/ Natural resources conservation/ Conservation/ Wildlife/ Habitats/ Social effect/ Public opinion/ Conservation Reserve Program/ Natural resources and earth sciences/ Natural resource management/ Agriculture and food/ Agricultural economics

Abstract: In the summer of 2001, we drew a random sample of 2,212 persons holding active Conservation Reserve Program (CRP) contracts across all USDA Farm Production Regions because we wanted information from people intimately familiar with the program's effects on their land and communities, we did not send surveys to contracts held in the name of trusts, banks, or other non-personal ownership (49 contracts). To carry out the survey, we followed a dependable step-by-step process designed to maximize the quality and quantity of responses for mail surveys (Dillman 1978, 2000). As a result, the overall response rate for the survey was 65%. Of the 35% who did not respond, only 1% (29 people) formally refused to participate. We were able to summarize the survey results nationally and by USDA Farm Production Region.

357. Slippage effects of the Conservation Reserve Program.

Wu, J. J.

American Journal of Agricultural Economics 82 (4): 979-992. (Nov. 2000)

NAL Call #: 280.8-J822; ISSN: 0002-9092 [AJAEB]A

Descriptors: land use/ land diversion/ federal programs/ conservation/ agricultural land/ environmental impact/ regression analysis/ erosion/ United States

Abstract: Each year, billions of dollars of public funds are expended to purchase conservation easements on farmland. One unintended impact of these programs is that they may bring non-cropland into crop production. Such a slippage effect can be caused by increased output prices and by substitution

effects. This article shows that for each one hundred acres of cropland retired under the Conservation Reserve Program (CRP) in the central United States, twenty acres of non-cropland were converted to cropland, offsetting 9% and 14% of CRP water and wind erosion reduction benefits, respectively. Implications of these results for the design of conservation programs are discussed.

This citation is from AGRICOLA.

358. Spatial modeling of preferred wireworm (Coleoptera : Elateridae) habitat.

Lefko, S. A.; Pedigo, L. P.; Batchelor, W. D.; and Rice, M. E.

Environmental Entomology 27 (2): 184-190.

(Apr. 1998)

NAL Call #: QL461.E532; ISSN: 0046-225X [EVETBX]

Descriptors: elateridae/ insect pests/ spatial distribution/ habitats/ models/ geographical information systems/ sampling/ soil water content/ pest management/ agricultural land/ federal programs/ Iowa/ habitat preference/ pest scouting/ Conservation Reserve Program

Abstract: Potential damage to crops after the Conservation Reserve Program is widespread. One probable result is the increased occurrence of soil-insect pests, primarily wireworms (Coleoptera: Elateridae). The likelihood of wireworm problems in the Iowa Conservation Reserve Program was compounded by the large amount of land enrolled in the program and the economic importance of corn, *Zea mays* L., the crop most often damaged by wireworms in the state. As a result, farmers need to consider pest management options that should include pest scouting. Wireworm presence/absence data from 1995 and 1996, and estimates of soil moisture from 89 Conservation Reserve Program fields were used to estimate variables useful for identifying where wireworms are more likely to occur. The most useful variables were a soil-moisture threshold of 17% and a moisture analysis that included meteorological data from only 1 yr before sampling occurred. These variables were coupled with a hydrologic model and embedded in a geographic information systems (GIS) framework. This computerized habitat model was run on the study area, Story County, Iowa, and generated a map indicating areas where wireworms were more likely to occur and where scouting should begin. Results of the model run indicate that most of Story County is suitable wireworm habitat and that there were areas considered highly favorable. The map generated by this computer model can be used as a guide for directing scouting within a field but does not identify areas where management tactics are necessary. The methodology used in this study is relatively simple, yet it performs the difficult task of combining time, space, and climatological variables to evaluate

wireworm habitat over a landscape. Moreover, it demonstrates one application of GIS technology in a discipline where the subject has characteristics that are inherently spatial.

This citation is from AGRICOLA.

359. The supply of land for conservation uses: Evidence from the Conservation Reserve Program.

Plantinga, A. J.; Alig, R.; and Cheng, H. T. *Resources, Conservation and Recycling* 31 (3): 199-215. (2001)

NAL Call #: TP156.R38R47; ISSN: 0921-3449

This citation is provided courtesy of CAB International/CABI Publishing.

360. A survey of CRP land in Minnesota: Legume and grass persistence.

Jewett, J. G.; Sheaffer, C. C.; Moon, R. D.; Martin, N. P.; Barnes, D. K.; Breitbach, D. D.; and Jordan, N. R. *Journal of Production Agriculture* 9 (4): 528-534. (Oct. 1996-Dec. 1996)

NAL Call #: S539.5.J68; ISSN: 0890-8524

[JPRAEN].

Notes: Subtitle: [Part] I.

Descriptors: land diversion/ federal programs/ regional surveys/ permanent grasslands/ legumes/ grasses/ persistence/ soil fertility/ phosphorus/ potassium/ soil ph/ Minnesota/ Conservation Reserve Program

Abstract: The federal Conservation Reserve Program (CRP), which had goals including reduced soil erosion and increased wildlife habitat, funded diversion of land from annual crops into permanent vegetation. The survival of grasses and legumes planted in CRP fields was not known. Our objectives were to assess the persistence and coverage of grasses and legumes in 6- to 8-yr-old CRP fields and to determine changes in soil pH, P, and K levels. We studied 151 CRP fields chosen from 10 counties in four geographical regions of Minnesota: 108 in the conservation practice 1 (CP-1) cover type (planted cool-season perennial grasses and legumes); 17 in the CP-2 cover type (planted warm-season native grasses); and 26 in the CP-10 cover type (existing vegetation). Statewide, legumes persisted in 82% of CP-1 fields planted to legumes, with 23% groundcover. Grasses persisted in 90% of the planted CP-1 fields with 47% groundcover. Alfalfa (*Medicago sativa* L.) and birdsfoot trefoil (*Lotus corniculatus* L.), the most persistent legumes, persisted in 90 and 67% of the planted fields with 21 and 32% groundcover, respectively. Smooth bromegrass (*Bromus inermis* Leyss), reed canarygrass (*Phalaris arundinacea* L.), and switchgrass (*Panicum virgatum* L.) persisted in over 90% of the planted fields and had 50% groundcover or more. Other legumes and grasses persisted in 50% or less of the planted fields and had 10%

groundcover or less. To maintain legumes in CRP fields, clipping is required or cultivars should be developed that persist without defoliation. Generally, soil pH, P, and K levels did not change from initial to final samples and should be adequate to obtain low levels of forage production.

This citation is from AGRICOLA.

361. A survey of CRP land in Minnesota: Weeds on CRP land.

Jewett, J. G.; Scheaffer, C. C.; Moon, R. D.; Martin, N. P.; Barnes, D. K.; Breitbach, D. D.; and Jordan, N. R.

Journal of Production Agriculture 9 (4): 535-542. (Oct. 1996-Dec. 1996)

NAL Call #: S539.5.J68; ISSN: 0890-8524 [JPRAEN].

Notes: Subtitle: [Part] II.

Descriptors: land diversion/ federal programs/ regional surveys/ permanent grasslands/ botanical composition/ weeds/ infestation/ coverage/ frequency distribution/ rodents/ disturbed land/ colonization/ Minnesota/ Conservation Reserve Program

Abstract: The federal Conservation Reserve Program (CRP) funded the conversion of eroding cropland to grass or grass-legume cover that was not to be tilled, hayed, or grazed for 10 yr. It was not known what the species composition of CRP fields would be after years of minimal disturbance. Our objective was to document the presence and percentage groundcover of weeds in 151 CRP fields located in 10 Minnesota counties; including 108 Conservation Practice (CP)-1 (cool-season legumes and grasses) fields, 17 CP-2 (native grasses) fields, and 26 CP-10 (existing vegetation) fields. Groundcover of each species present and of bare ground was scored in six 106-sq-ft sample plots per field. The most prevalent species were the primary noxious weed Canada thistle [*Cirsium arvense* (L.) Scop.], the secondary noxious weed quackgrass [*Elytrigia repens* (L.) Desv. ex. Nevski], and the non-noxious weeds dandelion (*Taraxacum officinale* Weber.) and goldenrod (*Solidago* spp.). Weed percentage groundcover was higher in CP-10 fields than in CP-1 or CP-2 fields, probably because many CP-10 stands were already thinning at the start of the CRP contract. Volunteer legumes and grasses were common in CP-10 fields. In CP-1 fields, legume and grass percentage groundcover usually was correlated negatively with weed percentage groundcover. Weed percentage groundcover and species richness were correlated positively. Gopher mounding was correlated positively with the amount of bare ground and with the percentage groundcover of annual and biennial weed species. Primary, secondary, and non-noxious weeds were each found in nearly 90% of the

fields studied. Widespread presence of noxious weeds on CRP fields is a cause for concern. Weed control issues should be addressed in planning a new CRP.

This citation is from AGRICOLA.

362. Systemic constraints to ecological well-being: The case of the 1985 Food Security Act.

Glenna, L. L.

Rural Sociology 64 (1): 133-171. (Mar. 1999)

NAL Call #: 281.28-R88; ISSN: 0036-0112 [RUSCA].

Notes: Comment by E.M. DuPuis, p. 158-163; Reply by L.L. Glenna, p. 164-171; Includes references.

Descriptors: conservation/ environmental legislation/ environmental protection/ erosion control/ constraints/ agricultural policy/ capitalism/ United States

Abstract: Although the conservation title of the 1985 Food Security Act was hailed by many as revolutionary in its attempts to control soil erosion, it has failed to live up to its billing. A theory is used that asserts that the state's systemic commitment to promoting capitalist growth constrains it from establishing and implementing policies that accomplish anything more than displacing one environmental problem onto others. The theory is tested through a discourse analysis of the hearings surrounding the Federal government's attempt to control soil erosion through the 1985 Food Security Act, which revealed that policy recommendations challenging the drive to maximize efficiency and production were declared flawed and unacceptable. Hence, the hearings were systematically distorted in favor of the dominant instrumental rationality. It is concluded that government policy initiatives alone are insufficient and that creating alternative social organizations of production is necessary to promote ecological well-being.

This citation is from AGRICOLA.

363. Targeting and the Environmental Quality Incentive Program.

Day, Esther

Washington, D.C.: American Farmland Trust, 2001.

Notes: Cited (Web): 7 January 2002, 14 April 2004.

<http://www.aftresearch.org/researchresource/wp/wp01-1.pdf>

Descriptors: United States---Environmental policy/ Environment---United States

Abstract: Analyzes how well initial allocations made under the Program addressed environmental problems identified by the government and key stakeholders; variables considered when distributing Program funds to states, grouped by: soil erosion, water quality/quantity, grazing, animal waste, wetland and wildlife issues, flooding threats, and other categories; US.

© 2004 PAIS, published by OCLC Public Affairs Information Service

364. Tillage and management alternatives for returning Conservation Reserve Program land to crops.

Shapiro, C. A.; Holshouser, D. L.; Kranz, W. L.; Shelton, D. P.; Witkowski, J. F.; Jarvi, K. J.; Echtenkamp, G. W.; Lunz, L. A.; Frerichs, R. D.; and Brentlinger, R. L.

Agronomy Journal 93 (4): 850-862.

(July 2001-Aug. 2001)

NAL Call #: 4-AM34P; ISSN: 0002-1962 [AGJOAT]

Descriptors: glycine max/ zea mays/ sorghum bicolor/ crop management/ tillage/ nature conservation/ land use/ land management/ crop residues/ litter plant/ plowing/ discing/ no-tillage/ grasslands/ field experimentation/ crop yield/ crop density/ weed control/ land banks/ Nebraska/ Iowa

Abstract: Accumulated vegetative residue was a concern when Conservation Reserve Program (CRP) land returned to grain crop production. This study was conducted to determine the effect of residue management, tillage, and crop choice on grain yield in the first year of cropping on CRP land that was predominately smooth brome (*Bromis inermis* Leyss). Three residue management practices (undisturbed, shred, and remove), three tillage systems [moldboard plow, disk, and no till], and three crops [corn (*Zea mays* L.), soybean [*Glycine max* (L.) Merr.], and grain sorghum [*Sorghum bicolor* (L.) Moench]] were used in a factorial arrangement of a 3-yr field experiment conducted in Nebraska on fine-silty, mixed, mesic Udic Haplustoll; fine-silty, mixed (calcareous), mesic Typic Ustorthent; and fine-silty, mixed, mesic Cumolic Halustoll soils. Residue management was not significant for corn ($P > F = 0.16$), sorghum ($P > F = 0.113$), and soybean ($P > F = 0.491$) although there were significant residue x tillage interactions. Tillage system was not significant ($P > F = 0.125$) for soybean yields, but plowing significantly ($P > F = 0.0001$) increased both corn and sorghum yields. Mean corn yields were 13% less for the no-till system than for the moldboard plow system. However, no-till corn yield differences were not significant ($P > F = 0.255$) when plant population (a possible measure of planter performance) and percent green rating (a measure of weed control) were included as covariates. Our recommendation for the first year of grain crop production on smooth brome CRP land is to shred the residue and plant soybean in a no-till system.

This citation is from AGRICOLA.

365. Tree planting on CRP acres in the South.

Lentz, R. J.

Journal of Soil and Water Conservation 43 (1): 60-61. (1988)

NAL Call #: 56.8 J822; ISSN: 0022-4561

Descriptors: forestry / trees/ conservation/ state programs/ USDA Forest Service/ forestry

Abstract: State forestry agencies in cooperation with

U.S. Department of Agriculture agencies and other state and local organizations were primarily responsible for reforesting 760,000 acres of non-industrial private forest lands in the 1985-1986 planting season using Forestry Incentives Program, Agricultural Conservation Program, and state incentive program funds.

© Cambridge Scientific Abstracts (CSA)

366. Using GIS to assess and manage the Conservation Reserve Program in Finney County, Kansas.

Wu J; Ransom MD; Nellis MD; Kluitenberg GJ; Seyler HL; and Rundquist BC

PE and RS: Photogrammetric Engineering and Remote Sensing 68 (7): 735-744; 40 ref. (2002)

NAL Call #: 325.28 P56

This citation is provided courtesy of CAB International/CABI Publishing.

367. Using the cow instead of the plow: A management option on former CRP land in the southern Great Plains.

Riddle, Richard R.; Donges, Randy D.; and United States. Natural Resources Conservation Service. Washington, D.C.: USDA, NRCS, Natural Resources Conservation Service; 11 p.: col. ill. (1999)

Notes: Cover title. Shipping list no.: 2000-0043-P. Includes bibliographical references (p. [11]).

SUDOCs: A 57.2:C 83/3.

NAL Call #: aSF85.3-.R53-1999

Descriptors: Conservation Reserve Program---United States/ Range management Great Plains/ Grazing Great Plains

This citation is from AGRICOLA.

368. Weed control guide for the Conservation Reserve Program.

Kidder, D. W.

In: PNW - Pacific Northwest Extension Publication, Washington, Oregon, and Idaho State Universities, Cooperative Extension Service, 329; Corvallis, Or.: Washington, Oregon, and Idaho State Universities, Cooperative Extension Service, 1987. 8 p.

Notes: ISSN: 0887-7254

NAL Call #: 275.29-W27PN

Descriptors: weed control/ abandoned land/ herbicide application/ herbicide recommendations

This citation is from AGRICOLA.

369. Weed control in CRP plantings.

Wrage, Leon J.

Brookings, S.D.: South Dakota State University, College of Agriculture & Biological Sciences; Series: FS (South Dakota State University. Cooperative Extension Service) 525-CRP; 10, 1 p.: ill. (2000)

Notes: Sponsoring agency: Cooperative Extension Service, U.S. Dept. of Agriculture; Caption title.

"May 2000"--p. [11].

NAL Call #: 275.29-So85Fs-no.-525-CRP

This citation is from AGRICOLA.

370. Weed control in the Conservation Reserve Program and newly established grasses.

Whitson, T. D. and Miller, S. D.

In: Bulletin: Wyoming University, Cooperative Extension Service, 442.4; Laramie, Wyo.: Wyoming University, Cooperative Extension Service, 1989. 6 p.

Notes: In subseries: Wyoming weed control series.

NAL Call #: 275.29-W99B

Descriptors: grassland improvement/ erosion control/ federal programs/ herbicides/ weed control/ Wyoming

This citation is from AGRICOLA.

371. Weed management for cover establishment and maintenance on Conservation Reserve Program acres.

Yenish, Joe.; Stannard, Mark.; and Washington State University. Cooperative Extension.

Pullman, Wash.: Cooperative Extension, Washington State University; Series: Extension bulletin (Washington State University. Cooperative Extension) 1867. (1998)

Notes: Title from web page. "Published January

1998" Description based on content viewed Nov. 3, 2002.

NAL Call #: 275.29-W22P-no.-1867

<http://cru.cahe.wsu.edu/CEPublications/eb1867/eb1867.html>

Descriptors: Conservation Reserve Program---United States/ Grasses---Weed control---United States/ Legumes---Weed control---United States/ Weeds---Control---United States

This citation is from AGRICOLA.

372. Weed population dynamics in land removed from the Conservation Reserve Program.

Felix, J. and Owen, M. D. K.

Weed Science 47 (5): 511-517.

(Sept. 1999-Oct. 1999)

NAL Call #: 79.8-W41; ISSN: 0043-1745 [WEESA6]

Descriptors: zea mays/ glycine max/ amaranthus/ andropogon gerardii/ bromus inermis/ melilotus officinalis/ population dynamics/ weeds/ field experimentation/ seasonal variation/ herbicides/ band placement/ broadcasting/ tillage/ land banks/ rotations/ no-tillage/ botanical composition/ crop yield/ iowa/ amaranthus rudis

Abstract: A field study was established in southern Iowa in 1994 to study seasonal and long-term weed population dynamics on land being brought back into production after 8 yr as part of the Conservation Reserve Program (CRP). The study was a split-plot design with four replications; two tillage regimes, two crop rotations, and three herbicide application

methods were used. Even though the tillage regime did not influence individual weed population density throughout the study, the no-till (NT) regime had more weeds compared to conventional tillage (CT). However, when weeds were grouped into categories, tillage influenced broadleaf weeds in 1994 and 1996 and total weeds in 1995. Plots under the NT regime had an average of 46 broadleaf weeds m⁽⁻²⁾ compared to 27 in CT in 1994, with *Amaranthus rudis* Sauer (common waterhemp) being the most prevalent. NT had a total of 186 weeds m⁽⁻²⁾ compared to 125 m⁽⁻²⁾ weeds in CT in 1995; however, in 1996, CT plots had 184 weeds m⁽⁻²⁾ compared to 121 m⁽⁻²⁾ in the NT regime. Except for broadleaf weeds in 1994, crop rotation did not influence the number of weeds, and herbicide application methods had the greatest effect on weed populations. Overall, weed populations were greater in 1997, 1996, and 1995 than in 1994 for all herbicide application methods. The no-herbicide treatment had the highest number of weeds throughout the study. The total number of weeds in band and broadcast treatments averaged 41 and 26 m⁽⁻²⁾ in 1994; 96 and 24 m⁽⁻²⁾ in 1995; 96 and 12 m⁽⁻²⁾ in 1996; and 109 and 95 m⁽⁻²⁾ in 1997. The use of broadcast herbicides in NT should be recommended for land coming out of CRP. Regardless of the herbicide application method or crop rotation, CT plots had better yields for both *Zea mays* L. (corn) and *Glycine max* L. (soybean). *Glycine max* had a better stand compared to *Z. mays* in the first year, indicating that a rotation starting with *G. max* might be preferred in the land coming out of CRP. This citation is from AGRICOLA.

373. Weed seedbank dynamics in post Conservation Reserve Program land.

Felix, J. and Owen, M. D. K.

Weed Science 49 (6): 780-787.

(Nov. 2001-Dec. 2001)

NAL Call #: 79.8-W41; ISSN: 0043-1745 [WEESA6]

Descriptors: chenopodium album/ amaranthus/ weeds/ seed banks/ buried seeds/ nature reserves/ tillage/ rotations/ weed control/ species diversity/ population density/ seed output/ band placement/ broadcasting/ seasonal variation/ Iowa

Abstract: The influence of tillage, crop rotation, and weed management regimes on the weed seedbank in land previously under the Conservation Reserve Program (CRP) for 8 yr was determined from 1994 through 1997. The study was a split-plot design with four replications, two tillage systems, two crop rotations, and three weed management treatments. Eleven weed species were recorded in 1994 and 1995, and 13 in 1996 and 1997. The weed seedbank was dominated by broadleaf species. In 1994, the first year after CRP, the seed population density in the top 15 cm of the soil profile was 51,480 seeds m⁽⁻²⁾, of which 60 and 20% were pigweed and common

lambsquarters. The population density of pigweed seeds in the seedbank increased over time and reached 51,670 seeds m⁽⁻²⁾ in 1996. In contrast, the seed population density for foxtail species was only 417 seeds m⁽⁻²⁾ in 1994, but it increased to 7,820 seeds m⁽⁻²⁾ in 1997. The large increase in foxtail species seed population density in the 4-yr period was mainly in the no-herbicide weed management treatment. The weed seedbank was reduced similarly by band and broadcast herbicide treatments. Tillage and crop rotation did not influence the weed seedbank or Shannon's diversity index, nor did they interact with the weed management treatments in any of the years. The weed seedbank population density varied with the years and time of soil sampling. Weed seed population densities tended to be greater in the fall but declined significantly by time of the spring sampling. The no-herbicide treatment had a more diverse weed seedbank compared with band and broadcast herbicide weed management treatments. An average of one grass and three broadleaf weed species were identified in the three weed management treatments. Band and broadcast herbicide treatments reduced the weed seedbank population density but did not affect the number of broadleaf weed species observed. This citation is from AGRICOLA.

374. When CRP contracts expire: Alternative strategies to encourage environmentally acceptable land use.

Rietveld, W. J.

Proceedings of the Great Plains Agricultural Council: 89-96. (1993)

NAL Call #: 282.9-G7992; ISSN: 0434-5835.

Notes: Meeting held June 2-4, 1993, Rapid City, South Dakota.

Descriptors: land use / contracts/ environmental protection/ land diversion/ great plains states of USA/ Conservation Reserve Program

This citation is from AGRICOLA.

375. Wireworm (Coleoptera: Elateridae) incidence and diversity in Iowa conservation reserve environments.

Lefko, S. A.; Pedigo, L. P.; Rice, M. E.; and Batchelor, W. D.

Environmental Entomology 27 (2): 312-317.

(Apr. 1998)

NAL Call #: QL461.E532; ISSN: 0046-225X [EVETBX]

Descriptors: elateridae/ insect pests/ incidence/ species diversity/ geographical distribution/ sampling/ agricultural land/ federal programs/ Iowa/ Conservation Reserve Program

Abstract: The extended fallow period required by Conservation Reserve Program contracts will likely heighten farmers' concerns about pests when returning acreage to production, particularly,

wireworms (Coleoptera : Elateridae). An extensive sampling program was conducted to estimate wireworm incidence and subsequent pest potential of wireworms in Iowa conservation reserve land. Eighty-nine fields were sampled during May and June of 1995 and 1996. Wireworms were recovered from approximately 45% of conservation reserve fields. Bait sampling provided a more precise means of detecting wireworm presence than core sampling. The spatial distribution of wireworms in Iowa, and consequent crop damage, probably is less restricted by environment than previously thought. This is attributable to the relatively large species diversity. Fourteen of the 15 elaterid species recovered have been associated with or are considered serious pests of corn. As a result, integrated pest management tactics, including insect pest scouting, will likely benefit the risk-averse grower in these newly converted lands.

This citation is from AGRICOLA.