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Research on Changes in Value of Ecosystem Services in Xilin River Basin

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The change in value of ecosystem services in Xilin River Basin was studied using the ways that Costanza et al evaluated ecosystem services. The result showed that from 1987 to 2000, the total value of ecosystem services in Xilin River Basin decreased by 31.6%. Of all the ecosystems, the ecosystem services value of grassland dropped to 4.38×10⁸\$ from 5.13×10⁸\$; the ecosystem services value of wetland dropped to 0.9×10⁸\$ from 2.62×10⁸\$, and that of cropland rose to 0.03×10⁸\$ from 0.01×10⁸\$. Among the total value of grassland ecosystem services, the ratios of F. sibiricum steppe, S. baicalensis steppe, A. lymus + buncgrass steppe and A. lymus + forbs steppe decreased from 1987 to 2000 and those of S. krylavii steppe and Ar. frigida steppe increased, indicating clearly that the steppe ecosystem in Xilin River Basin is degenerating seriously. It was concluded that the decline in value of ecosystem services in Xilin River Basin was resulted from the degradation of ecosystems and the decrease in area of the natural ecosystems.

【Key Words】 : **ecosystem services degradation of ecosystem steppe ecosystem Xilin River Basin**

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【References】

Chinese Journal Full-text Database

10 Hits

- 1 CHEN Xi-rui et al(Department of Tourism and Environment, Xi'an University of Arts and Science, Xi'an, Shaanxi 710065); **Research on Land Use Change and Its Ecosystem Services Value in Hancheng City**[J]; Journal of Anhui Agricultural Sciences; 2010-34
- 2 Li Qinglan¹, Ren Jun¹, Xu Jiangkun², Tao Ling¹(1. Institute of Environmental Ecology Environmental science and municipal engineering of Lanzhou Jiaotong University, Lanzhou 730070, China; 2. Jiangsu Xinyuan Environmental protection Co., Ltd, Nanjing 210004, China); **Economic Value of Urban Vegetation Ecosystem Services: A Case Study in Lanzhou**[J]; Environmental Science and Management; 2008-01
- 3 JIN Liang^{1,2}, YAO Yun-feng², ZHANG Wen-juan²(1. College of Economy, Inner Mongolia Financial and Economic Institute, Hohhot 010051, China; 2. College of Ecology and Environment, Inner Mongolia Agricultural University, Hohhot 010019, China); **Review on the ecosystem services evaluation of grassland reserve**[J]; Grassland and Turf; 2008-05
- 4 DENG Zhen-yong¹, MIN Qin-wen², ZHANG Qiang¹, LI Wen-hua², LIU Xing-shi³, WANG Li-xian⁴, LU Qi⁵, LI Shi-dong⁶, CAO Jian-hua⁷, XU Jin-qiang⁸(1. Lanzhou Institute of Arid Meteorology, Key Open Laboratory of Arid Climate Change and Reducing Disaster, China Meteorological Administration/Key Laboratory of Arid Climate Change and Reducing Disaster of Gansu Province, Lanzhou 730020, China; 2. Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences, Beijing 100101, China; 3. Institute of Geography and Agricultural Ecology, Chinese Academy of Sciences, Changchun 130012, China; 4. Beijing Forestry University, Beijing 100083, China; 5. China Academy of Forestry, Beijing 100091, China; 6. State Forestry Administration, Beijing 100714, China; 7. Institute of Karst Geology, Chinese Academy of Geological Sciences, Guilin 541004, China; 8. Meteorological Bureau Center of Information, Lanzhou 730020, China); **Summarize of Study of Ecological Meteorological Disaster in China**[J]; Plateau Meteorology; 2010-03
- 5 Cai Bang-cheng et al; **Quantitative Research on the Relationship between Urbanization and Ecosystem Services of Kunshan City**[J]; Environmental Protection Science; 2010-04

Wu Ying, Shan Zhong, Liu Bin, Min Gang, Yanwei (State Key Laboratory of Environ Simulation and Pollution

- 6 WU Xiang, SHEN Zhenyao, LIU Kunmin, GONG Tongwei (State Key Laboratory of Environ Simulation and Pollution Control, School of Environment, Beijing Normal University, Beijing 100875, China); [Effect of land use change on ecosystem services value of the upper reaches of the Yangtze River](#)[J]; Transactions of the Chinese Society of Agricultural Engineering; 2009-08
- 7 HE Guang-bao¹, ZHOU Qin¹, ZHANG Jun², YAO Jian¹ (1. College of Architecture & Environment, Sichuan University, Chengdu 610065, China; 2. School of Life Sciences, Sichuan University, Chengdu 610065, China); [Effect of Land Use Change on Ecosystem Services Value in Chengdu](#)[J]; Sichuan Environment; 2009-06
- 8 TANG Zheng, CAI Bang-cheng, WANG Yuan, LU Gen-fa, SONG Li-juan, WANG Xiang-hua (State Key Laboratory of Pollution Control and Resource Reuse, School of the Environment, NanJing University, Nanjing 210093, China); [Application of Evaluation of Ecosystem Services' Value in Land Use Assessment of Zhenjiang](#)[J]; Ecological Economy; 2007-07
- 9 CAI Bang-Cheng, LU Gen-Fa~*, SONG Li-Juan, HUANG He-Ping, HAN Shang-Fu, CHEN KE-Liang (State Key Laboratory of Pollution Control and Resource Reuse, School of the Environment, Nanjing University, Nanjing 210093, China); [Variation of ecosystem services' value of Kunshan based on the land use change](#)[J]; Acta Ecologica Sinica; 2006-09
- 10 XIAO Jian-Hong¹, SHI Guo-Qing¹, MAO Chun-Mei¹, WANG Min², XING Zhen-Xiang¹ (1. State Key Laboratory of Hydrology-Water Resources and Hydraulic Engineering, Hohai University, Nanjing 210024, China; 2. Business School of Hohai University, Nanjing 210024, China); [Evaluation of effects of dams on river ecosystem service functions in China](#)[J]; Acta Ecologica Sinica; 2007-02

【Citations】

Chinese Journal Full-text Database

5 Hits

- 1 CHEN Siqing^{1,2}, LIU Jiyuan², ZHUANG Dafang², XIAO Xiangming^{2,3} (1. Institute of Remote Sensing Applications, CAS, Beijing 100101, China; 2. Institute of Geographic Sciences and Natural Resources Research, CAS, Beijing 100101, China; 3. Institute for the Study of Earth, Oceans and Space, University of New Hampshire, Durham, NH 03824, USA); [Quantifying Land Use and Land Cover Change in Xilin River Basin Using Multi-temporal Landsat TM/ETM Sensor Data](#)[J]; Acta Geographica Sinica; 2003-01
- 2 XIE Gao di, LU Chun xia, Xiao Yu, and ZHENG Du (The Institute of Geographical Science and Natural Resource Research, CAS, Beijing 100101 China); [The Economic Evaluation of Grassland Ecosystem Services in Qinghai-Tibet Plateau](#)[J]; Journal of Mountain Research; 2003-01
- 3 Ouyang Zhiyun, Wang Rusong and Zhao Jingzhu (Research Center for Eco Environmental Sciences, Academia Sinica, Beijing 100080). Chin. J. Appl. Ecol., 1999, 10(5): 635~640.; [Ecosystem services and their economic valuation.](#)[J]; CHINESE JOURNAL OF APPLIED ECOLOGY; 1999-05
- 4 Wang Shiping and Li Yonghong (Institute of Botany, Academia Sinica, Beijing 100093); [Degradation mechanism of typical grassland in Inner Mongolia.](#)[J]; CHINESE JOURNAL OF APPLIED ECOLOGY; 1999-04
- 5 Wang Wei; Liu Zhong-ling; Hao Dun-yuan; Liang Cun-zhu (Institute of Natural Resources, Inner Mongolia University, Huhhot 010021) (The Inner Mongolia Grassland Ecosystem Research Station of the Chinese Academy of Sciences); [RESEARCH ON THE RESTORING SUCCESSION OF THE DEGENERATED GRASSLAND IN INNER MONGOLIA——II. ANALYSIS OF THE RESTORING PROCESSES](#)[J]; ACTA PHYTOECOLOGICA SINICA; 1996-05

【Co-references】

Chinese Journal Full-text Database

10 Hits

- 1 LIU En-sheng et al (Graduate School of CAS, Beijing 100039); [Regression Model Analysis of the Relationship among Catches of Main Fishes in Lake Taihu](#)[J]; Journal of Anhui Agricultural Sciences; 2006-08
- 2 WANG Guan-yong^{1,2}, DAI Shi-bao² (1. College of Territorial Resources and Tourism, Anhui Normal University, Wuhu 241000, China; 2. Land Information Engineering Department, Chuzhou University, Chuzhou 239012, China); [Variation of Water Resource and Its Quality of Huaihe River in the Past Half Century](#)[J]; Journal of Anhui Normal University (Natural Science); 2008-01
- 3 YU Guang-ming, WEI Ya-li, LU Di, TAO Wen-xing, ZHANG Min, WANG Li-guo (School of Urban and Environmental Sciences, Central China Normal University, Wuhan 430079, China); [Impact of regional land consolidation on the ecosystem and its compensation](#)[J]; Journal of Safety and Environment; 2006-04
- 4 ZHANG Zhi-qiang^{1,2}, XU Zhong-min¹, WANG Jian¹, CHENG Guo-dong¹ (1. State Key Laboratory of Frozen Soil Engineering, CAREERI, CAS, Lanzhou Gansu 730000, China; 2. Scientific Information Center for Resources and Environment, CAS; [Value of the Ecosystem Services in the Heihe River Basin](#)[J]; Journal of Glaciology and Geocryology; 2001-04
- 5 XU Zhong-min¹, ZHANG Zhi-qiang¹, SU Zhi-yong², CHENG Guo-dong¹ (1. State Key Laboratory of Frozen Soil Engineering, CAREERI, CAS, Lanzhou Gansu 730000, China; 2. State Key Laboratory of Arid Agricultural Ecology, Lanzhou University, Lanzhou G; [Measuring Total Economic Value of Restoring Ejina Banner's Ecosystem Services —— Application of the Non-Parametric Estimation](#)[J]; Journal of Glaciology and Geocryology; 2002-02
- XU Zhong-min, REN Fu-kang, MA Song-yao, GUO Ting-tian (Gansu 730000, China); [Comparison Analysis of the](#)

- 6 [FENG Qi, LIU Wei, SI Jian-hua, SU Yong-hong \(Cold and Arid Regions Environmental and Engineering Research Institute, Chinese Academy of Science, Lanzhou Gansu 730000, China\); Comparison Analysis of the Stated Preference Techniques for Valuing Environment\[J\]; Journal of Glaciology and Geocryology; 2003-06](#)
- 7 [FENG Qi, LIU Wei, SI Jian-hua, SU Yong-hong \(Cold and Arid Regions Environmental and Engineering Research Institute, Chinese Academy of Science, Lanzhou Gansu 730000, China\); Utilization of Water Resources and Its Environment Effect in the Tarim River Basin\[J\]; Journal of Glaciology and Geocryology; 2004-06](#)
- 8 [DENG Zhen-yong¹, ZHANG Qiang¹, QING Ji-zu¹, XU Jin-fang², HUANG Lei-nuo¹, ZHANG Shu-yu³ \(1. Lanzhou Institute of Arid Meteorology, Key Open Laboratory of Arid Climate Change and Reducing Disaster of China Meteorological Administration, Key Laboratory of Arid Climate Change and Reducing Disaster of Gansu Province, Lanzhou Gansu 730020, China; 2. Gansu Meteorological Bureau Center of Information, Lanzhou Gansu 730000, China; 3. Shaanxi Meteorological Bureau, Xi'an Shaanxi 710015, China\); Impact of Climate Warming and Drying on Dry-Hot Wind in the North of China\[J\]; Journal of Glaciology and Geocryology; 2009-04](#)
- 9 [ZHANG Chun Guang ZHAO Ya Hui \(Institute of Zoology, The Chinese Academy of Sciences, Beijing 100080, China\); MIGRATION OF THE CHINESE SUCKER \(MYXOCYPRINUS ASIATICUS\) IN YANGTZE RIVER BASIN WITH A DISCUSSION ON THE POTENTIAL EFFECTS OF THE DAMS ON FISH \[J\]; Acta Zoologica Sinica; 2001-05](#)
- 10 [HUANG Xiang~\(1,3\) LI Wei-Hong~2 \(1.2 Xinjiang Institute Of Ecology and Geography, Chinese Academy Of Sciences, Urumqi 830011, China; 3. Graduate School, Chinese Academy of Sciences, Beijing 100039, China\); Study of the Function and Value of Ecosystem of Hungrines\[J\]; Environmental Science and Management; 2006-07](#)

【Secondary References】

Chinese Journal Full-text Database

10 Hits

- 1 [DONG Chang-gui et al \(School of Public Policy and Management, Tsinghua University, Beijing 100872\); Ecological Value Evaluation of Beijing Miyun Reservoir Based on Contingent Valuation Method \(I\)\[J\]; Journal of Anhui Agricultural Sciences; 2008-33](#)
- 2 [ZHANG Zhen-feng et al \(Management College, Hebei University of Technology, Tianjin 300130\); Inspirations and Progresses on Research of Degradation and Restoration of Grassland Ecosystem in China\[J\]; Journal of Anhui Agricultural Sciences; 2009-20](#)
- 3 [ZHENG Jian-wei et al \(School of Environmental Science and Engineering, Nanjing University of Information and Science and Technology, Nanjing, Jiangsu 210044\); Assessment of Ecosystem Service Value of Natural Reserve in Hainan Island\[J\]; Journal of Anhui Agricultural Sciences; 2009-31](#)
- 4 [ZHANG Yan et al \(School of Geographical Sciences, Guangzhou University, Guangzhou, Guangdong 510006\); Effects of Land Use Change on the Service Value of Ecosystem\[J\]; Journal of Anhui Agricultural Sciences; 2010-04](#)
- 5 [WANG Xiao-ai et al \(Department of Tourism and Resource Environment, Zaozhuang College, Zaozhuang, Shandong 277160\); Assessment on the Service Functional Value of Coastal Urban Ecosystem along Beijing-Hangzhou Grand Canal \(in South Shandong\)\[J\]; Journal of Anhui Agricultural Sciences; 2010-22](#)
- 6 [LIU Yao-bin et al \(School of Economics and Management, Nanchang University, Nanchang, Jiangxi 330031\); Summary of Evaluation on Urban Freshwater Ecosystem Services\[J\]; Journal of Anhui Agricultural Sciences; 2010-25](#)
- 7 [PU Chun-ling et al \(Department of Land and Resources, Xinjiang Agricultural University, Urumqi, Xinjiang 830052\); Analysis on the Oasis Environment-friendly Land-use Pattern of Xinjiang\[J\]; Journal of Anhui Agricultural Sciences; 2010-33](#)
- 8 [CHEN Xi-rui et al \(Department of Tourism and Environment, Xi'an University of Arts and Science, Xi'an, Shaanxi 710065\); Research on Land Use Change and Its Ecosystem Services Value in Hancheng City\[J\]; Journal of Anhui Agricultural Sciences; 2010-34](#)
- 9 [ZOU Jin-lang et al \(Institute of Poyang Lake Eco-economics, Jiangxi University of Finance and Economics, Jiangxi Province, Nanchang, Jiangxi 330013\); Response of Ecosystem Service Value Based on Land Use Changes and Analysis of Its Driving Factors in Hilly Region with Red Soil\[J\]; Journal of Anhui Agricultural Sciences; 2011-09](#)
- 10 [MENG Jijun, YAN Fen College of Urban and Environmental Sciences, Peking University, Key Laboratory of Earth Surface Processes, Ministry of Education, Beijing 100871; Temporal and Spatial Variation of LUCC Driving Forces on the Edge of Metropolis: A Case Study of Changping District\[J\]; Acta Scientiarum Naturalium Universitatis Pekinensis; 2008-03](#)

China Proceedings of conference Full-text Database

3 Hits

- 1 [Su Chao-yang Miao Chang-hong \(Research Center of Yellow River Civilization and Sustainable Development and College of Environment and Planning, Henan University, Kaifeng 475004, China\); Based on the Value of Ecosystem Services of Land Use Planning assessment in Kaifeng\[A\]; \[C\]; 2008](#)
- 2 [He Yimei~1, Hang Huali~2, Zhu Yubi~2, Yang Zisheng~1, Yang Longfei~1 \(1. Yunnan University of Finance and Economics, Kunming 650221; 2. College of Economic Management, Southwest University, Chongqing 400715\); Study on the Changes of Ecosystem Services Value in the Middle and Low Mountain Basin and Valley Area of Southwest Yunnan Driven by the National Project of Converting Farmland to Forest in Recent Eight Years—A Case Study in Luxi City\[A\]; \[C\]; 2010](#)

- 3 DU Jia-qiang~(1,2),WANG Jin-sheng~2,SHU Jian-min~1,TENG Yan-guo~2 (1 Chinese Research Academy of Environmental Sciences,Beijing,100012,China;2.College of Water Science, Beijing Normal University,Beijing,100875,China);[Effects of land use change on the ecosystem service value in Chongqing city](#)[A];[C];2008

【Secondary Citations】

Chinese Journal Full-text Database

6 Hits

- 1 HUANG Xing Wen,CHEN Bai Ming (Commission for Integrated Survey of Natural Resources,Chinese Academy of Sciences,Beijing 100101,China);[The theory and application about the regionalization of Chinese ecological assets](#)[J];ACTA ECOLOGICA SINICA;1999-05
- 2 OUYANG Zhi Yun WANG Xiao Ke MIAO Hong (Research Center for Eco Environmental Sciences,Chinese Academy of Sciences,Beijing 100080,China);[A primary study on Chinese terrestrial ecosystem services and their ecological-economic values](#)[J];ACTA ECOLOGICA SINICA;1999-05
- 3 LIU Jiyuan, LIU Mingliang, DENG Xiangzheng, ZhuangDafang,ZHANG Zengxiang, LUO Di(1. Inst. of Geographic Sciences and Natural Resources Research, CAS, Beijing 100101, China;2. Inst. of Remote Sensing Applications, CAS, Beijing 100101, China);[The land use and land cover change database and its relative studies in China](#)[J];地理学报(英文版);2002-03
- 4 XIE Gao di,ZHANG Yi li,LU Chun xia,ZHENG Du,CHENG Sheng kui(Institute of Geographic Sciences and Natural Resources Research,CAS,Beijing 100101,China);[Study on valuation of rangeland ecosystem services of China](#)[J];Journal of Natural Resources;2001-01
- 5 Li Wenhua(Commission for Integrated survey of Natural Resources, CAS, Beijing 100101);[FLOOD OF YANTZE RIVER AND ECOLOGICAL RESTORATION](#)[J];JOURNAL OF NATURAL RESOURCES;1999-01
- 6 JIANG Yan Ling and ZHOU Guang Sheng (Laboratory of Quantitative Vegetation Ecology,Institute of Botany,Academia Sinica,Beijing 100093);[ESTIMATION OF ECOSYSTEM SERVICES OF MAJOR FOREST IN CHINA](#)[J];ACTA PHYTOECOLOGICA SINICA;1999-05

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