

1993

# 1993 Annual Report Nebraska Game and Parks Commisison

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*1993 Annual Report*



*Nebraska Game and Parks Commission*



## Offices

### Headquarters & District V

2200 N. 33rd St.  
Lincoln, NE 68503-0370  
402-471-0641

### Metro Office

1313 Farnam St.  
Omaha, NE 68102-1826  
402-595-2144

### District I

P.O. Box 725  
Alliance, NE 69301-0725  
308-762-5605

### District II

P.O. Box 934  
Bassett, NE 68714-0934  
402-684-2921

### District III

P.O. Box 934  
Norfolk, NE 68702-0934  
402-370-3256

### District IV

RR4 Box 36  
North Platte, NE 69101-9412  
308-535-8025

## Commissioners

### District 1

Charles Wright, Lincoln  
4/15/91-1/15/96

### District 2

Bill Grewcock, Omaha  
1/15/92-1/15/97

### District 3

J. Alan Cramer, Wayne  
3/15/88-1/15/93

Dr. Tim Biga, Norfolk  
3/5/93-1/15/98

### District 4

Randall Stinnett, Inland  
1/16/90-9/7/94

### District 5

Gloria Erickson, Holdrege  
7/30/90-1/15/95

### District 6

Dr. Charles Blaha, Omaha  
10/5/92-9/7/97

### District 7

Donald W. Forney, Lakeside  
9/19/91-1/15/94

## Administration

Rex Amack, Director  
Assistant Directors:  
William J. Bailey, Jr.  
Dale R. Bree

# Purpose

*The Nebraska Game and Parks Commission is charged with managing and controlling the state's wildlife, parks and outdoor recreational resources in the best long-term interest of the people.*

*To accomplish that purpose, the Commission plans and implements its policies and programs efficiently and objectively; maintains a rich and diverse environment in Nebraska's lands and waters; provides outdoor recreation opportunities; manages wildlife resources for the maximum benefit of the people, and strives to help Nebraskans appreciate their roles in the natural world.*

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*Complete copies of each division's annual report may be obtained by contacting the individual division at the Game and Parks Commission, 2200 N. 33rd St., P.O. Box 30370, Lincoln, NE 68503-0370.*



# ADMINISTRATION

## Administration

Administration of the Game and Parks Commission provides support services for all divisions through the following offices and functions: Personnel; Internal Audit; In-service Training; Aircraft Operations; Word Processing; Headquarters Maintenance; Telephone Switchboard; and Staff Assistants, Secretarial and Clerical Personnel in the district offices. Liaison with the Legislature and assistance to the Director's Office also are provided.

Purchasing and Inventory were transferred to the Budget and Fiscal Division in 1993.

## Personnel

Functions of the Personnel Section include administration of payroll, worker's compensation, retirement, insurance, accident reports, performance planning, personnel records, and preparation of the

personal-services portion of the agency's operational budget.

The labor contract between the State and the Nebraska Association of Public Employees, Local 61, American Federation of State, County and Municipal Employees represents 224 agency employees. The labor contract with the State Law Enforcement Bargaining Council represents 51 agency employees. The personnel office acts as liaison to the State Labor Relations Administrator.

There were 20 permanent employees hired in 1993 (17 replacements and 3 new positions), and 39 employees were promoted/reclassified to higher positions. Turnover for 1993 was 3.6% (16 employees).

Many letters on employment possibilities and career information were received and answered. Replies were made to surveys regarding salary, benefits and personnel turnover.

Personnel consulted the Office of Risk Management regarding worker's compensation cases. Worker's compensation claims paid for the fiscal year ending June 30, 1993, totaled \$334,293.74, an increase of nearly 11% over 1992.

Game and Parks Commission employee motor vehicle accidents declined from 25 to 22 in 1993 — a 12% decrease.

## PAYROLLS

### Permanent

Total wages: \$11,982,124.86

Average number of employees per month: 437

### Temporary

Total wages: \$3,456,962.45

Average number of employees per payroll: 444

Largest payroll: 865 employees

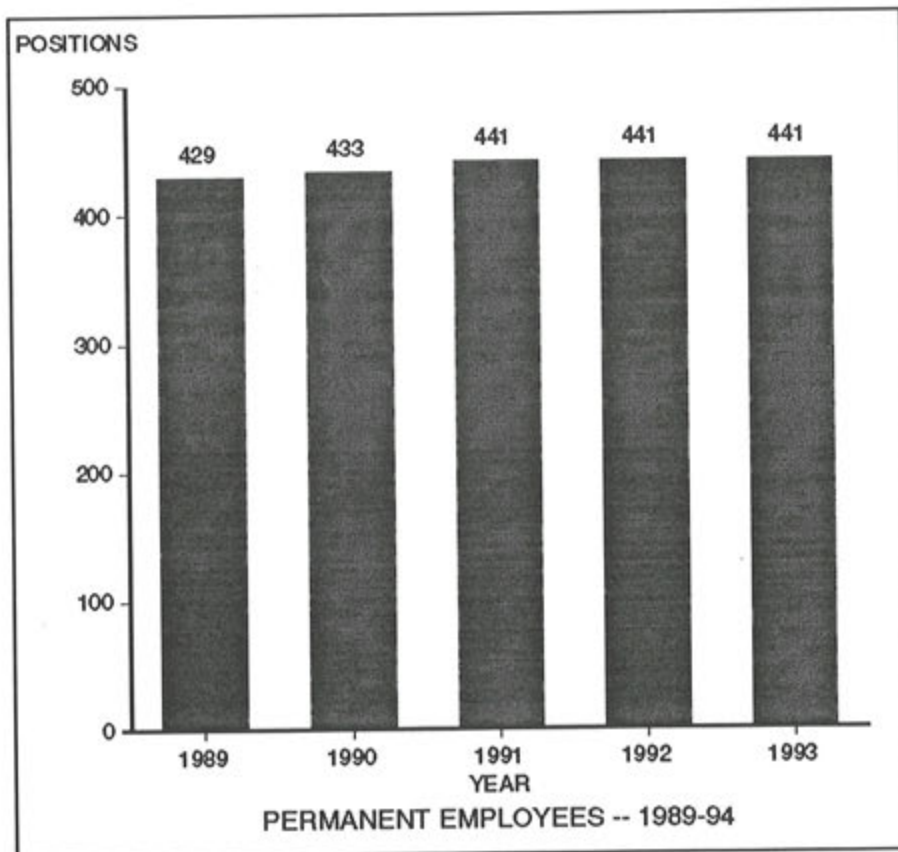
Smallest payroll: 141 employees

## In-Service Training

Devoted to bettering performance and preparing employees for positions of higher responsibility, in-service training directs its efforts primarily to meet the specialized needs of individual staff members who enroll in a variety of short courses, seminars and workshops. Broad-based training needs are met through in-house workshops for groups of employees.

## Aircraft Operations

The Piper Super Cub was flown a total of 189.3 hours during 1993, up from 150.1 hours in 1992. There were 75 flights in 1993 compared to 57 flights the previous year. Cost of operation was \$25.80 per hour, not including a major overhaul, which boosted operating costs to \$59.79 per hour. Figures do not include insurance or hangar costs. Depreciation on the aircraft is unknown. The aircraft was used for various surveys, counts, antelope depredation complaints, fish and wildlife, law enforcement and photography.



# BUDGET & FISCAL

This division has five sections:

1. Permits — including issuing boating certificates, operating the Customer Service Center in the Lincoln headquarters, accounts receivable and permit accounting departments.
2. Fiscal Accounting — prepares agency voucher payments and maintains various files and reports connected with all agency expenditures.
3. Audits and Cost Center Accounting — audits all political subdivisions and maintains Area Cost Center Expenditure Accounting.
4. Budget Section — prepares and maintains the agency's budget and financial resources.
5. Purchasing & Inventory — maintains statewide inventory system and coordinates the purchase of goods and services.

Major functions include:

- Maintain fiscal records in accord with state and federal laws.
- Maintain area cost accounting on income and expenditures Commission internal control.
- Administer fiscal operation and control of federal programs.
- Administer the fiscal control of issuing State Boating Certificates.
- Issue all hunting and fishing permits to vendor accounts.
- Receive, deposit and maintain records on all the funds received by the Commission.
- Prepare and maintain Commission's fiscal and operating budgets.
- Perform audits of federal programs relating to participating subdivisions.
- Administer an internal program of forms control, including development and use of forms.
- Perform other administrative functions as assigned by the Board of Commissioners, Director and/or Assistant Directors.

## FINANCIAL STATEMENT

<b>January 1, 1993, Cash &amp; General Fund Appropriation on hand:</b>			
Environmental Trust Fund		\$	0.00
Game Cash (Fund 2332)			
Lifetime Hunt*	507,200.00		
Lifetime Fish*	347,110.00		
Other	<u>8,551,414.31</u>		9,405,724.31
State Park Cash (Fund 2333)			5,310,119.41
Nebraska Habitat Cash (Fund 2334)			3,614,593.52
Non-game and Endangered Species Cash (Fund 2335)			311,929.90
Nebraska Snowmobile Cash (Fund 2337)			50,839.74
NORDA Cash (Fund 2338)			465,177.36
Trail Development Assistance (Fund 2339)			33,740.71
Federal Fund 4332 — Land & Water Conservation Fund, Bureau of Reclamation (8972)			7,978.98
General Fund (Fund 1000)	5,322,818.62		
Less Amount Lapsed	<u>104,925.27</u>		<u>5,217,893.35</u>
<b>Total Cash &amp; General Fund Appropriations on hand January 1, 1993</b>			<b>24,417,997.28</b>
<b>Cash &amp; General Fund Appropriations received during 1993:</b>			
Environmental Trust (Fund 2329)			868,311.00
Game Cash (Fund 2332)			
Lifetime Hunt*	72,400.00		
Lifetime Fish*	48,900.00		
Other	<u>10,953,234.37</u>		11,074,534.37
Park Cash (Fund 2333)			8,728,581.30
Nebraska Habitat Cash (Fund 2334)			2,807,396.73
Non-game & Endangered Species (Fund 2335)			133,518.10
Nebraska Snowmobile Cash (Fund 2337)			9,796.68
NORDA Cash (Fund 2338)			1,360,123.17
Trail Development Assistance (Fund 2339)			466.78
Federal Fund 4332 — Land & Water Conservation Fund and Bureau of Reclamation (8972)			1,064,028.58
General Funds			<u>8,265,362.00</u>
<b>Total Cash &amp; General Fund Appropriations received during 1993</b>			<b>\$ 34,312,128.71</b>
<i>*Income derived from the sale of Lifetime Permits cannot be expended. However, the interest earned on the investment of such income is available for expenditure.</i>			
<b>Expenditures by Fund Type during 1993:</b>			
Environmental Trust (Fund 2329)			0.00
Game Cash (Fund 2332)			12,291,445.25
State Park Cash (Fund 2333)			7,863,079.80
Nebraska Habitat Cash (Fund 2334)			2,796,600.42
Non-game & Endangered Species (Fund 2335)			92,811.90
Nebraska Snowmobile Cash (Fund 2337)			4,217.50
NORDA Cash (Fund 2338)			570,746.87
Trail Development Assistance (Fund 2339)			30,075.57
Federal Fund 4332 — Land & Water Conservation Fund and Bureau of Reclamation (8972)			1,043,398.45
General Fund			<u>9,066,725.40</u>
<b>Total Expenditure during 1993</b>			<b>33,759,101.17</b>
<b>End of the Year Fund Balances for 1993:</b>			
Environmental Trust (Fund 2329)			868,311.00
Game Cash (Fund 2332)			
Includes Lifetime Hunt	579,600.00		
Includes Lifetime Fish	396,101.00		
Other	<u>7,213,203.43</u>		8,188,813.43
Park Cash (Fund 2333)			6,175,630.91
Nebraska Habitat Cash (Fund 2334)			3,625,389.82
Non-game & Endangered Species (Fund 2335)			352,636.10
Nebraska Snowmobile Cash (Fund 2337)			56,418.92
NORDA Cash (Fund 2338)			1,254,553.66
Trail Development Assistance (Fund 2339)			4,141.92
Federal Fund 4332 — Land & Water Conservation Fund and Bureau of Reclamation (8972)			28,609.11
General Funds			<u>4,416,529.95</u>
<b>Total cash &amp; General Fund Appropriation Balance remaining on December 31, 1993</b>			<b>\$ 24,971,024.82</b>



## 1993 EXPENDITURES

### OPERATIONAL COSTS

Program 162 — Environmental Trust	\$	0.00
Program 330 — Habitat Development		
Habitat Cash		1,431,645.22
Program 336 — Wildlife Conservation, Enforcement, Promotion & Development		
Sub-Program 01 — Enforcement		
General Fund		422,572.32
Game Cash		2,474,072.54
Park Cash		<u>257,972.32</u>
		3,154,617.18
Sub-Program 02 — Information & Education		
Game Cash		1,865,490.94
Park Cash		<u>338,483.53</u>
		2,203,974.47
Sub-Program 04 — Game		
Game Cash		<u>1,069,237.05</u>
		1,069,237.05
Sub-Program 05 — Fish		
Game Cash		2,784,514.13
Federal		<u>432,581.81</u>
		3,217,095.94
Sub-Program 06 — Resource Services		
Game Cash		<u>1,844,726.31</u>
		1,844,726.31
Sub-Program 10 — Outdoor Recreation		
General		5,172.36
Game Cash		167,236.08
Park Cash		2,586.10
Federal		<u>84,001.98</u>
		258,996.52
Sub-Program 15 — Aquarium		
General Fund		170,970.61
Game Cash		<u>76,514.78</u>
		247,485.39
Sub-Program 16 — Non-Game & Endangered Species		
General Fund		319,330.95
Non-Game Cash		92,811.90
Federal		<u>7,891.73</u>
		420,034.58
<b>PROGRAM 336 — SUMMARY</b>		
General Fund		918,046.24
Game Cash		10,281,791.83
Park Cash		599,041.95
Non-Game Cash		92,811.90
Federal		<u>524,475.52</u>
		12,416,167.44
Program 337 — Agency Administration		
General Fund		629,697.90
Game Cash		1,290,571.16
Park Cash		395,147.45
Habitat Cash		<u>104,322.83</u>
		2,419,739.34
Program 549 — Park Administration & Operation		
General Fund		4,775,320.05
Park Cash		5,815,553.19
NORDA		46,217.15
Federal		<u>2,641.56</u>
		10,639,731.95
Program 550 — Federal Aid & Planning		
General Fund		228,894.87
Game Cash		133,526.46
Trail Development Cash		<u>75.57</u>
		362,496.90
Program 617		
— Engineering, Area Maintenance & Snowmobile		
General Fund		2,511,876.52
Game Cash		31,849.46
Park Cash		727,407.52
NORDA Cash		475,481.67
Snowmobile Cash		4,217.50
Federal		<u>16,900.86</u>
		3,767,733.53
Program 628 — Credit Card Discount		
Game Cash		1,601.31
Park Cash		28,822.82
Habitat		<u>0</u>
		30,424.13
<b>TOTAL OPERATIONAL COSTS — 1993</b>	<b>\$</b>	<b>31,067,938.51</b>

## 1993 REVENUE

Environmental Trust Cash Fund		
Transferred from Lottery Trust Fund		\$ 868,311.00
State Game Cash Fund Income		
Hunting Activities (lifetime hunt--\$72,400)		3,859,584.18
Fishing Activities (lifetime fish--\$48,900)		2,631,557.89
Federal Reimbursement		2,819,690.56
NEBRASKAland Magazine		
Subscriptions	548,036.00	
Advertising	<u>1,793.97</u>	549,829.97
Calendars, books, slides, etc.		104,479.57
Sale of surplus property		83,577.57
Land lease and crop income		112,064.47
Boating permits		416,379.83
Incidentals		43,511.22
Liquidated and Property damages		52,626.98
Interest earned on investment		380,039.65
Cash Gifts		<u>21,192.48</u>
Total Game Cash Fund		11,074,534.37
State Park Cash Fund Income		
Park Entry Permits		2,173,978.50
Ice Fishing Shelter Permits		55.00
Property damage		1,487.34
Interest earned on investment		245,256.83
Camping fees, cabin lots, etc.		953,252.93
Rental of cabins		2,470,080.27
Concession leases & sales by lessee		89,710.50
Swimming pool admissions		140,590.92
Entry admission — Arbor Lodge		121,953.27
Rental of recreation equipment		
Horses, boats, etc.		491,195.59
Concession sales, leases and agency facilities		405,821.62
Cafe — Fort Robinson		218,229.72
Cookouts — Chadron		2,496.01
Cafe — Platte River		91,521.70
Cafe — Mahoney		993,856.24
Cash gifts		29,801.98
Sale of surplus property		78,211.69
Incidentals		62,047.42
Catering		<u>159,043.72</u>
Total Park Cash Fund		8,728,591.30
Nebraska Habitat Fund Income		
Habitat Stamps		1,528,800.00
Waterfowl Stamp		34,831.74
Interest earned on investment		146,909.57
Federal reimbursements		973,211.83
Incidentals		7,462.38
Cash gifts		80,945.39
Crop/Pasture		19,919.95
Sale of surplus property		<u>15,315.87</u>
Total Habitat Cash Fund		2,807,396.73
Non-Game & Endangered Species Cash Fund Income		
Cash gifts		872.00
Federal reimbursements		26,858.70
Interest		14,016.92
Non-game donations		91,208.72
Incidentals		<u>561.79</u>
Total Non-Game & Endangered Cash Fund		133,518.10
Nebraska Snowmobile Cash Fund Income		
75% of fee, less issuing fee		7,513.59
Interest earned on investment		<u>2,283.09</u>
Total Nebraska Snowmobile Cash Fund		9,796.68
Trail Development Assistance Cash Fund Income		
Interest earned on investment		466.78
Total Trail Development Assistance Cash Fund		466.78
NORDA Cash Fund Income		
1-cent tax on cigarets		1,323,532.37
Interest earned on investment		32,366.34
Incidentals		<u>4,224.46</u>
Total NORDA Cash Funds		1,360,123.17
Federal Funds		
Land & Water Conservation Fund,		
Bureau of Reclamation		<u>1,084,028.58</u>
TOTAL Cash & Federal Income		26,046,766.71
Received during 1993		\$

1993 CAPITAL IMPROVEMENTS

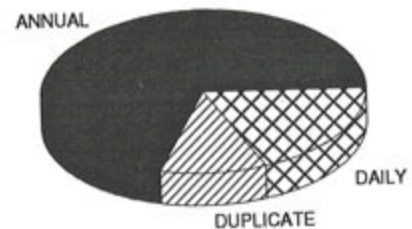
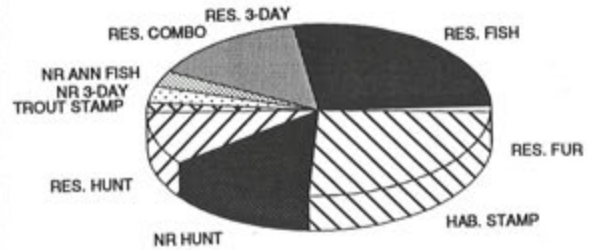
AREA OF EXPENDITURE	1000 GENERAL FUND	2332 GAME CASH	2333 PARK CASH	2334 HABITAT CASH	2338 NORDA CASH	2339 TRAIL ASSISTANCE	4332 FEDERAL FUNDS	TOTAL
Acquisition of habitat lands				1,260,632.38				1,260,632.38
<b>IMPROVEMENTS &amp; RENOVATIONS</b>								
Fort Robinson	2,889.82	272.43	49,048.33					52,210.58
Indian Cave			24,442.14		6,257.00		10,728.00	41,427.14
Eugene T. Mahoney			42,039.41		7,252.37			49,291.78
Ponca					3,764.98			3,764.98
Smith Falls			42,121.83		9,570.58			51,692.41
Platte River					4,118.71			4,118.71
Arbor Lodge			11,443.11					11,443.11
Recreation Areas General		1,143.75	79,736.26				3,431.25	84,311.26
Calamus SRA		4,252.09						4,252.09
Fremont			2,950.14					2,950.14
Louisville					17,044.41			17,044.41
Dead Timber			16,768.84					16,768.84
Johnson Lake					1,040.00			1,040.00
Lake McConaughy		13,651.31	1,010.57				41,230.15	55,892.03
Pawnee		3,623.27	25,543.74				25,543.73	54,710.74
Wildcat Hills			123.90					123.90
Merritt Reservoir		15,055.98					45,167.91	60,223.89
Grove Lake WMA		23,481.21						23,481.21
Sacramento-Wilcox		3,477.97						3,477.97
Sherman Reservoir WMA		21,718.13						21,718.13
Clear Creek		29,197.03						29,197.03
Calamus Hatchery		102,352.38						102,352.38
North Platte Hatchery		6,424.48						6,424.48
Central Office		7,278.23						7,278.23
District I -- Alliance		8,196.00						8,196.00
District II -- Bassett		3,275.00						3,275.00
District III -- Norfolk		24,836.57						24,836.57
Rivers & Streams Acquisition		36,432.11						36,432.11
Catfish Run		2,452.34						2,452.34
Willow Lake		60.00						60.00
Frye Lake (acquisition)		121,724.00						121,724.00
Missouri River access (acquisition)		12,446.50						12,446.50
Fishing Access		1,343.31						1,343.31
Niobrara Fishing Bridge		28,767.93						28,767.93
Walgren Lake		4,201.25						4,201.25
Oliver Reservoir		5,199.61						5,199.61
Calamus Access		69,245.05						69,245.05
Peru Boat Ramp			940.00					940.00
Niobrara Boat Ramp			938.60					938.60
Trail Development Assistance						30,000.00		30,000.00
Political Sub-Divisions							237,236.69	237,236.69
Boat Assistance to Cities						30,000.00	499,380.51	499,380.51
<b>TOTAL</b>	<b>2,889.82</b>	<b>552,105.03</b>	<b>297,106.87</b>	<b>1,260,632.38</b>	<b>49,048.05</b>	<b>30,000.00</b>	<b>499,380.51</b>	<b>2,691,162.66</b>



TYPE OF PERMIT	NUMBER SOLD*	AMOUNT*
Resident Fish	134,229	\$ 1,543,633.50
Resident Hunt	67,557	574,234.50
Res. Fish-Hunt Combo	43,033	839,143.50
Nonresident Hunt	20,022	800,880.00
Nonres. Annual Fish	7,046	176,150.00
3-Day Res. Fish	2,638	19,785.00
3-Day Nonres. Fish	21,834	163,755.00
Trout Stamp	24,046	120,230.00
Resident Fur Harvest	4,104	61,560.00
Habitat Stamp	143,498	1,434,980.00
Annual Park Permit	158,404	1,584,040.00
Daily Park Permit	210,183	420,366.00
Duplicate Park Permit	47,115	235,575.00
<b>Total</b>		<b>\$ 7,974,332.50</b>

\*Figures are for calendar year 1993, based on data available as of March 18, 1993.

### 1993 HUNT/FISH PERMITS & STAMPS



### 1993 PARK PERMITS

### 1993 DEER / ANTELOPE / TURKEY PERMITS

TYPE OF PERMIT	LANDOWNER	NONRESIDENT	RESIDENT	TOTAL	INCOME
Archery Antelope	2	52	438	492	\$ 13,980.00
Firearm Antelope	50	0	600	650	12,500.00
<b>Total Antelope</b>	<b>52</b>	<b>52</b>	<b>1038</b>	<b>1,142</b>	<b>26,480.00</b>
Archery Deer	102	621	13,075	13,798	324,620.00
Firearm Deer	7,209	1,748	52,397	61,354	1,294,830.00
<b>Total Deer</b>	<b>7,311</b>	<b>2,369</b>	<b>65,472</b>	<b>75,152</b>	<b>1,619,450.00</b>
Fall Turkey -- Archery	3	59	488	550	9,407.50
Fall Turkey -- Firearm	167	293	5,058	5,518	87,377.50
Spring Turkey -- Archery	10	205	1,348	1,563	27,470.00
Spring Turkey -- Firearm	252	858	8,664	9,774	161,880.00
<b>Total Turkey</b>	<b>432</b>	<b>1,415</b>	<b>15,558</b>	<b>17,405</b>	<b>286,135.00</b>
<b>Grand Total</b>					<b>\$1,932,065.00</b>

Permit Fees: Landowner — Turkey, \$7.50; Deer & Antelope, \$10; Nonresident — Turkey, \$35; Deer & Antelope, \$100; Resident — Turkey, \$15; Deer & Antelope, \$20.

# ENGINEERING

The Engineering Division performs functions very similar to Engineering, Architectural and Surveying firms in the private sector of business, in our supporting role to the other Divisions of the Commission. We provide professional, technical and planning assistance for all divisions and administration.

## GOALS & OBJECTIVES

- Develop appropriate design solutions for agency engineering and architectural projects.
- Draw complete plans, write specifications and bid agency construction projects.
- Administer construction contracts, conduct inspections and write reports.
- Select and work with private consulting firms hired to assist the Commission.
- Furnish Cadastral surveys, prepare legal descriptions and provide construction survey layouts for agency projects.
- Produce construction specifications and manage division records.

## METHODS

The division uses state of the art computer-aided drafting equipment to produce design, construction drawings and surveys. Up to the minute electronic survey equipment is also used in the field to accomplish survey tasks. Correspondence, records and specification typing are also computerized. The division intends to maintain and upgrade its computer capabilities to continue improving services to the agency.

## PROJECTS

### Aksarben Aquarium

- Replacement drapes were speced, bid and installed.
- Plans and specifications for a storage facility and handicap-accessible parking were developed, bid, contract issued and construction begun.
- New video equipment for the

theater was speced and forwarded to Fisheries for purchase.

### Arbor Lodge SHP

- Boundaries of property to be added to the park were surveyed.

### Blue River SRA

- A survey of the south boundary line was completed.

### Branched Oak SRA

- Plans for shoreline stabilization project were developed.

### Boyd County

- Boundary survey completed for property in Boyd County.

### Buffalo Creek WMA

- Construction of 3.2 miles of barb wire fencing was contracted and completed.

### Calamus Fish Hatchery

- Hatchery construction completed.
- Phase protectors were designed and installed.
- Equipment for a lake water filter was purchased and installed.
- Area residences' patio and retaining wall additions were designed and construction completed.
- Ground water supply piping revisions developed, bid and built.
- A replacement oxygen line was developed, bid and installed.
- Wiring for well No. 6 was developed and completed.
- A study for temperature device installation was completed and a report submitted.

### Calamus Reservoir WMA

- Four fishing access roads and parking lots were completed.
- An accessible fishing pier and support facilities at Gracie Creek area were contracted and built.

### Catfish Run

- Accessible fishing pier and parking lot construction completed.

### Chadron State Park

- The new stable was planned, bid and construction started.
- Preliminary plans and cost estimate were developed for pool and fountain construction.

### Clay County

- Boundary survey of 8.275 acres in Clay County was completed.

### Clear Creek WMA

- A metal shop, storage building and mechanical systems were developed, bid, built.

### Cornhusker WMA

- Samples of material stockpiled on the area were submitted to a laboratory for asbestos testing.

### District I Office (Alliance)

- Design and construction of accessibility improvements completed.

### District III Office (Norfolk)

- Design and construction of accessibility improvements completed.

### District IV (North Platte)

- Entryway asphalt repairs at the office were developed, bid and construction completed.

- Fish pond drain line repairs were designed, contracted and built.

### District V Office (Lincoln)

- A consulting firm has been contracted to design an addition to the shipping and loading dock of Building A.

### Eugene T. Mahoney SP

- Construction of second four-bedroom cabin was completed.
- Theater signs were designed, ordered and installed.
- Boundary survey of the adjoining Lind property was completed.
- An aeration system for US West Lake was planned and installed.
- Emergency electrical rewiring was completed at Riverview Lodge to bring the system in line with current codes for range installation.
- Plans and specifications for the Park Lodge condensate water filter assembly were developed and work completed.
- The Park Lodge Kitchen wall was redesigned to provide an additional dining room access door, and the equipment layout was revised. The door, revised equipment layout, a gas broiler and a ice making machine were specified, purchased and installed.
- A parking area and walkway lighting were designed, bid and construction completed.
- A study was completed and a re-



port submitted on expansion of Park Lodge parking.

- Lighting for the grounds around the Theater was completed.

#### State Fair Area

- Plans for accessible improvements were developed.

#### Fort Atkinson SHP

- The condition of the superintendent's residence was investigated, a report submitted to Parks.

#### Fort Kearny SHP

- Replacement of the air conditioning in an area residence was planned and the system installed.

#### Fort Robinson State Park

- Installation of the fire sprinkler system and stage curtains was completed for the Post Playhouse.
- Repairs to swimming pool gutters and water tower were completed.
- Post Playhouse director's office was designed.
- Renovation of the Post Playhouse was completed.
- Emergency repairs to water well were completed.
- Removal of asbestos from the Park Lodge was completed.
- Repairs for damage from floods and storms were completed.
- Renovation of the Park Lodge residence was completed.

#### Fremont SRA

- Emergency installation of ventilators and timer element in new shower building was completed

#### Frye Lake WMA

- The 274-acre area was surveyed.

#### Grove Lake WMA

- A consulting firm was hired to evaluate the condition of the spillway structure and to develop project documents for emergency repairs. Project was bid and work completed.

#### Hamilton County

- 116.92 acres in the county were surveyed and a legal description written.

#### Indian Cave State Park

- Stable plans and specifications were developed, bids let, and construction started.
- A design for an addition to the superintendent's residence was developed.

- Emergency repairs to water system were made.

- Underground electrical service to the new stable site was installed.

#### Keller Park SRA

- A design was developed for locations of culverts and a possible holding pond to alleviate water and erosion problems experienced after heavy rains.

#### Lake McConaughy SRA

- Construction of a boat ramp at Diver's Bay was completed.

#### Lewis & Clark SRA

- Design was completed for Phase I of Weigand Marina Project.

#### Merritt SRA

- Boat ramp, parking area and facilities designed and built.

#### Mormon Island SRA

- A new water well was planned, bid, and constructed.

#### Morrill County

- Boundary survey was completed for property in Morrill County.

#### Mulberry Bend

#### Missouri River Access Site

- Boat ramp and support facilities were developed and bid.

#### Muskrat Run WMA

- 1440 feet of barb wire fence were bid and construction completed.

#### Niobrara State Park

- An accessible fishing bridge and a foot bridge along the trail being established were designed, bid and and construction started.
- A topo map of the trailhead site was developed.

#### North Platte Fish Hatchery

- Site evaluation, preliminary design and cost estimate study were completed and work begun on Phase I for hatchery improvements by the consultant, Fish Pro.

#### Oliver Reservoir SRA

- An accessible floating fishing pier was designed, bid and construction started.

#### Operations & Construction

- A design for a portable kiosk was developed and submitted to the Operations & Construction.

#### Osage WMA

- Emergency repairs were made to natural gas line to residence.

#### Parks Division

- Preliminary design for a bell structure was developed for the Parks.

#### Pawnee SRA

- Construction of a maintenance shop was completed, including mechanical, electrical and HVAC system.

#### Pibel Lake SRA

- New 4-inch cased water well was drilled and made operational.

#### Platte River State Park

- A design to convert Scott Lodge Restaurant to menu service was developed.
- A new pool heater was designed, bid and installation begun.

#### Ponca State Park

- Emergency water well repairs were completed.
- Bids for repairs to assistant superintendent's residence were requested, but none were received. Negotiations with a local contractor are in progress.

#### Ponderosa WMA

- A septic system for the area cabin was designed, bid and built.

#### Rock Creek Fish Hatchery

- Roof replacement/repairs were completed on the area lean-to and SW residence.
- An addition to an area residence was designed and built.
- Contractor completed trimming of trees on the area.
- A report was written and submitted for a raceways cover.

#### Sandy Channel SRA

- East boundary was surveyed.

#### Shell Lake WMA

- North and east boundaries were located by survey personnel.

#### Sherman Reservoir WMA

- Maintenance shop was planned, bid and constructed.

#### Smith Falls State Park

- Carpeting was installed in the trailer residence.
- Design for a stone picnic shelter was completed.
- An observation deck and boardwalk were designed and built.
- Air conditioning in the trailer residence was bid and installed.
- A boundary survey of the area was completed.

#### Summit Lake SRA

- A plan for lake bank stabilization was developed.

#### Thomas Creek WMA

- The south boundary of the area was located.

#### Two Rivers SRA

- Restroom and shelter roof repairs were designed and completed.
- Repainting of 10 caboose cabins was contracted and completed.

#### Valentine Fish Hatchery

- Plans for fish hatching batteries to were developed and submitted to Fisheries Division.
- A submersible pump was speced, bid and work completed.

#### Various Wildlife Management and Recreation Areas

- A new design for double-wide accessible toilets was developed.

#### Wagon Train SRA

- Replacement well plans and specifications were developed, bid and construction completed.

#### Walgren Lake SRA

- Accessible fishing pier was designed, bid and construction begun.

#### Willow Creek SRA

- Construction of fish cleaning station was completed.

#### Windmill SRA

- Renovation of the shower building's utility setup and interior were designed, bid and construction started.

#### 3001 Y St. Shop and Office

- An air conditioning unit was bid and installed.

### SEPTIC SYSTEM TESTING

In 1992, Rex Mihulka coordinated wastewater and groundwater sampling, laboratory testing, and evaluation for septic systems at Lake Ogalala, Lewis and Clark and Fremont SRAs. Additional sampling and testing was completed at these sites and at Summit Lake SRA in 1993.

This testing was performed as requested by the Nebraska Department of Environmental Quality to ensure the continued operation of our fish cleaning stations and other septic systems throughout the Park System.

Preliminary results are very positive and can be reviewed at our office in Lincoln. A report on the test results will be prepared in 1994.

### SEMINARS ATTENDED

Bill Weddle and Jim Sheffield attended a two-day seminar in Yankton, SD, concerning the design and specifications of boat dock systems and marinas.

Bill Weddle, Jeff Broman and Judy Alderman attended a two-day seminar in Lincoln on the "Green Lights" program, sponsored by the U.S. Environmental Protection Agency.

The program is geared to installing energy efficient lighting in state buildings. The Nebraska Energy Office and LB309 Task Force have requested all state agencies participate in the "Green Lights" program.

Jeff Broman attended a three-day seminar on wetlands, sponsored by the Corps of Engineers.

Terry Majewski attended a three-day exposition and convention regarding computer hardware, software and systems for architecture, engineering and construction.

Rex Mihulka attended a three-day national conference for the masonry industry. He also met with a representative from the manufacturer of our fish cleaning tables.

Rex Heiden attended a one-day seminar on state plane coordinates and a 2½-day seminar in Lincoln, covering a variety of survey subjects.



# FISHERIES

The division is responsible for maintaining, developing and managing Nebraska's aquatic resources and regulating their use.

Anglers established a number of new hook-and-line record in 1993, including striped bass, yellow bass, white perch, pumpkinseed, tiger musky and stonecat, in spite of cold, wet weather. New state archery records were set for bigmouth buffalo and grass carp, while new underwater-spearfishing marks were set for smallmouth bass and bluegill.

A record 368 Master Angler awards were issued for bluegill, while the second highest number of Master Angler crappie were taken, since the program began in 1966.

## Stocking

During 1993, the five hatcheries provided more than 25 million fry, fingerling and adult fish for stocking in Nebraska waters and for trade to other states. Included were 9.4 million white bass, 9.2 million walleye, 2.7 million white bass x striped bass hybrids (wipers), 400,000 yellow perch, 400,000 rainbow trout, 300,000 channel catfish and 200,000 largemouth bass.

## Habitat Enhancement

The Commission filed five applications with the Nebraska Department of Water Resources for in-stream flow appropriations to protect fish and wildlife habitat along 250 miles of the Platte River. Ten years of study and analysis led to the filings.

Information collected by the agency was also instrumental in the restoration of Boyer Chute on the Missouri River by the Papio-Missouri NRD and planned restoration of Missouri River chutes and oxbows at Middle Decatur, Hamburg, Tieville and Tobacco bends. Hamburg Bend was bought by the Corps of Engineers through its mitigation program, and Game and Parks will manage the area.

A fish ladder was built at the Belmont Diversion to allow fish movement up the North Platte River. Plans were approved to improve shoreline for fish and angling success at Branched Oak Lake. Piers and jetties will be built to protect two coves from wind and waves.

Other activities by district staff included: Adding brush piles at 10 lakes to attract fish; construction of tire reefs at two lakes; planting emergent vascular plants at three lakes, and bank stabilization at Long Pine Creek. A solar-powered aeration unit

## Fish Populations & Angling Assessments

Fish populations in 90 impoundments and lakes and in 17 streams and rivers were sampled by district fisheries personnel. Equipment included nets, trawls and electrofishing gear. Fish densities, lengths, weights and growth rates were assessed to evaluate management practices.

Creel surveys were conducted on 15 lakes in an effort to gauge angler benefits from management as well as on the Missouri River to limit paddlefish harvest.



Brad Eifert, District V Fisheries, works a creel census at Branched Oak Lake.

was installed at Goose Lake to maintain adequate oxygen for fish.

## Fishing Access

Frye Lake in Grant County was purchased by the Commission in 1993, and four sites were evaluated for feasibility of constructing new fishing lakes.

Sport Fish Restoration Funds, administered by the Commission, were granted to the City of Norfolk to improved fishing access are Skyview Lake, and plans were reviewed to renovated Cottonmill Lake in Kearney, using federal funds. Four other cities and/or counties received federal funds to improved motorboat access to the Missouri River by rehabilitating existing boat ramps.

Anglers at the put-and-take trout lake at Two Rivers SRA purchased 24,342 tags and harvested an average of 3.02 trout per tag — the highest catch rate in seven years.

## Fish Kills

The cool, wet weather undoubtedly contributed to the unusually low number of fish kills recorded in 1993. Of 18 fish kills investigated, seven occurred on lakes, five on ponds, five on streams and one on a river. Of these, 10 kills were attributed to natural causes and eight to agricultural pollution. Of the estimated 41,144 fish killed, 82% died in Spring Creek near Ruskin.



## Research

Reports were completed on the following studies:

- Status of channel catfish, flathead catfish, sauger, sicklefin chub, flathead chub, silver chub, plains minnow and western silvery minnow in the Missouri River;
- Pre and post-restoration fish usage of the Boyer Chute;
- Identification of selected freshwater fish using fillets and scales.

Studies are being conducted on the following topics:

- Fish suitability criteria for the lower and central Platte River;
- Angler creel on the lower Platte River;
- Reproductive success and year-class strength of paddlefish, sauger, walleye and other species in the Missouri River;
- Exploitation of paddlefish in the Missouri River, based on tag returns;
- Restricting harvest of paddlefish in the Missouri to 1,600 individuals through creel survey monitoring;
- Statewide management plan for walleye, including evaluation of length limits;
- An evaluation of saugeye (walleye x sauger) in combination with and as a replacement for walleye.

In addition, a bibliography was developed of all fisheries publications and reports written by Commission personnel from 1930-1990.

## Technical Assistance

Advice on management of private ponds was provided to hundreds of landowners, as well as to many city and county officials. In several cases, staff helped individuals renovate existing fish populations and begin more effective fisheries management.

Personnel also assisted other state and federal agencies by providing expert testimony, particularly regarding environmental issues. An assessment of the Nebraska Public Power District's fisheries management program at Sutherland Reservoir was done for the Nebraska Department of Environmental Quality. The agen-

cy also commented on the relicensing of Central Nebraska Public Power and Irrigation District's Platte River hydropower project through the Federal Energy Regulatory Commission. The Commission also participates in the Nebraska Aquaculture Advisory Board.

Fisheries personnel provided fish health inspections for nine private hatcheries in Nebraska. In addition, inspections were done for out-of-state hatcheries at the request of conservation agencies in Wyoming and Iowa. Staff attended many meetings with other agencies, organizations and institutions, representing fisheries and aquatic interests. Many programs were presented to educate and inform others about fisheries causes.

## Professional Involvement

Staff attended several professional meetings designed to improve effectiveness of management practices. Personnel made presentations and attended the annual meetings of the Nebraska Chapter of the American Fisheries Society (AFS) and Great Plains Fisheries Workers; Midwest Fish and Wildlife Conference; Mid-Continent Warmwater Fish Culture Workshop; Rocky Plains Fish Health Workshop; GIS Educational Seminar, and Central States Small Impoundment Work Group.

Personnel also participated in technical committees sponsored by the North Central Division of the AFS and attended their meetings on: Walleye, Esocid (pike); Centrarchid (bass/crappie/sunfish); Reservoir, and Rivers and Streams. These committees conduct projects and studies that are economical for participating states because of shared resources.

On-the-job training was provided through a workshop on fish health, taught by Richard Nelsen of the U.S. Fish and Wildlife Service's Fish Disease Control Center at LaCrosse, WI.

## Ak-Sar-Ben Aquarium

Some 65,000 people visited the facility during 1993, an average of 211 people per day. There were 416

tours for 17,512 people, 13 VIP tours for 340 people and five meetings.

During the year, the Aquarium was considered by AFS Fisheries Management Section to house its "Hall of Excellence," which recognizes individuals nationally who have made significant contributions to the field of fisheries management. The agency is actively seeking this honor.

## Aquatic Education

In its eighth year, Aquatic Education, headquartered at the Aquarium, conducted 64 fishing clinics and courses with 5,268 participants.

Teacher resource packets were provided to 580 teachers who registered with the program, as were student packets. In addition, the Aquarium continues to provide small fish, mostly game species, for classroom aquariums. While only a few teachers take part in this activity, they consider it a significant tool.

The 147 certified instructors and 195 non-certified volunteers contributed 3,476 hours at clinics and courses eligible for in-kind federal aid matching funds.

A major new resource was the video, completed last year, "Grandpa, Can We Go Fishing."

## Technological Progress

The division made major strides in computerization. Revisions were made in the way fish populations are sampled, analyzed and data stored. A computer network is being established to allow personnel to share hardware and software, as well as access data and other information even from remote locations across the state.



# INFORMATION & EDUCATION

## News Program

Maintaining a timely news program in both print and broadcasting remains vital to the agency. Approximately 300 news stories were released during the year.

News is transmitted electronically to the Associated Press, five daily newspapers and the Nebraska Press Association's bulletin board, which acts as a wire service for member papers across the state.

News stories were also contributed to NEBRASKAland Magazine's quarterly newspaper supplement, *Outdoor Nebraska*.

The weekly outdoor report is a cooperative effort of the I&E, Law Enforcement and Parks divisions and recaps hunting and fishing information, wildlife viewing locations, lodging availability and snow conditions. *Outdoor Nebraska*, the Commission's weekly radio program is aired over 40 stations in Nebraska and surrounding states. Support for the program continues to grow and spawn new opportunities. Several radio stations, including stations in the Kansas City area, have regular interview segments with I&E personnel from the Lincoln, Omaha and North Platte offices. These segments allow us to convey timely and informative news and information.

Video news continued in 1993 with stories released nearly every other week. Subjects ranged from antelope restoration in the Sandhills to the volunteer effort to build a walkway at Smith Falls State Park. Video news releases are popular with Nebraska TV stations. New video equipment purchased in 1993 which will allow even better service to the television news audience and expand agency video projects.

The news department was also involved in assisting with news releases for the newly established Nebraska Environmental Trust, which is located at Commission headquarters.

Other duties included: Coordination of the GPC's Outdoor Alley exhibit at the Nebraska State Fair; producing GPC News, the monthly agency newsletter sent to all employees, and Vendor Bulletin, the newsletter sent to all permit vendors after each Commissioners' meeting.

## Alliance Office

The District I public information officer (PIO) also serves as regional editor for *NEBRASKAland Magazine* while handling information and education programs in the Panhandle.

The PIO was involved in various magazine assignments and public information efforts. Another special



Artist Randy Bright and staff assistant Peggy Kapeller prepare Habitat Art Contest entries for exhibit in lobby of Commission headquarters.

activity was coordination of the Nebraska High School .22 Silhouette Championships at Pressey WMA.

Ongoing programs include news releases and media contacts on an as-needed basis, presentations to groups, schools and organizations, and involvement with Outdoor Education workshops and courses.

## North Platte Office

The District IV PIO is responsible for agency information and education objectives in southwest Nebraska, while also serving as regional editor for *NEBRASKAland Magazine*.

The PIO directed the annual National Cornhusker High School Trap

Shoot at Doniphan. Sponsored by the Commission, it attracted 385 student shooters.

Ongoing programs included a weekly TV news feature, programs, seasonal radio shows and local area news releases. The PIO was also involved in the Outdoor Education portfolio and other divisional support as needed.

## Omaha Office

Sale of big-game permits again accounted for significant business at the Omaha Office. An all-time high in total sales of \$229,769.92 was recorded, up 1% from the previous year.

The office continued to direct much of its public relations effort at the broadcast media in order to reach large audiences. Weekly radio shows were broadcast on 13 stations. The office also increased its contact with print media, and a wide variety of public service announcements were produced. Appearances at civic groups, clubs, youth organizations and the like remained an important function, with 39 presentations made.

The office had an extremely busy year on the outdoor education front. About 1,100 students were certified in 50 hunter education courses. Support was provided in several areas, including the Know Nebraska Tours canoe trip and the Becoming An Outdoorswoman workshop. This office also coordinated the exhibits at the Omaha Boat, Sport & Travel Show and the Omaha Bass Show. The office also compiles and posts a weekly outdoor report.

## NEBRASKAland Magazine

In 1993, *NEBRASKAland Magazine* published nine 52-page regular issues and a 100-page combined January-February special, *Walk in the Woods*. This latest in a series of book-length, single-topic issues was coordinated by Senior Editor Ken Bouc. *Walk in the Woods* explores





New backyard habitat exhibit at State Fair was a joint project of I&E, Wildlife, Outdoor Ed and Resource Services divisions.

dynamic forest systems and their relationship to other living things.

Authors for the book included several Commission staff members and a variety of outside experts including University of Nebraska faculty members, the director of the Platte River Whooping Crane Maintenance Trust, the Nebraska State Forester and members of his staff plus others. Well-received by subscribers and reviewers, it earned a silver award in the prestigious National Gold Ink Awards Competition.

*NEBRASKAland* was also recognized by its peers in 1993, winning second place for best magazine in the Association for Conservation Information Awards Competition. In the same competition, Senior Editor Ken Bouc's article "Tad Pollys, Wigglers and Wotta Frogs" won second place for best general interest article.

Monthly issues included articles and photo essays on a wide range of topics including hunting, fishing, parks, wildlife, fish and game management, habitat and Nebraska history and culture. Distinguished guest contributors included ornithologist Dr. Paul Johnsgard, entomologist Dr. Brett Rattcliff, biologist James Rosowski, historian Tom Buecker and mammalogist Dr. Patricia Freeman.

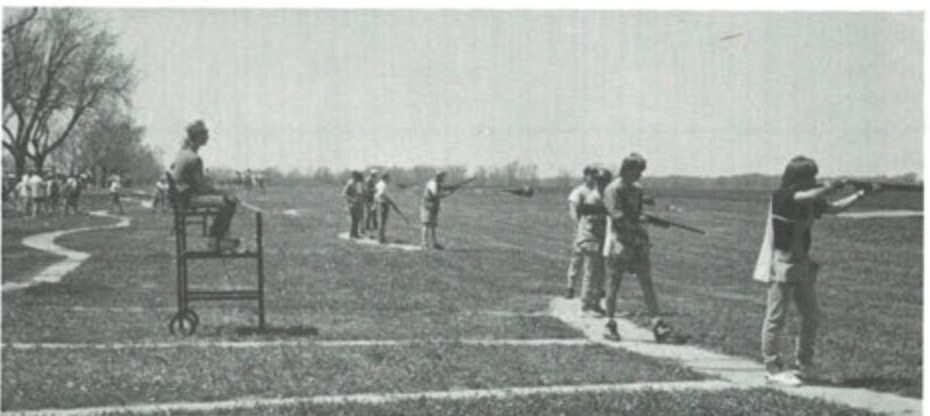
Six *NEBRASKAland* articles were reprinted by nationally distributed publications. Several more articles were reproduced with permission for newsletter, classroom and informational use by organizations, universi-

ty classes and businesses.

Two special insert publications, introduced in 1992, were continued, and *Outdoor Nebraska* accompanied four magazine issues. In addition, four-color gatefold inserts featuring threatened and endangered species were included in three issues.

Printing of the popular *NEBRASKAland Calendar* was moved up to early May to allow for sales at the state parks during the summer. In addition, it is offered as an incentive to subscribers who renew on their first notice. Calendars are also sold through newsstands, various Commission locations, and direct mail. Over 50,000 copies were produced, featuring 12 full-color *NEBRASKAland* photographs.

As in the past, magazine staff gave presentations about the magazine and its production to a variety of classes and organizations.



Rocky Hoffmann, District IV PIO, coordinates the annual Cornhusker Trap Shoot held at Doniphan for junior and senior high school students.

Average monthly circulation rose to approximately 48,000, an increase of about 5 percent.

### State Fair

Some major changes were made at the Commission's exhibit area at the Nebraska State Fair. Foremost was conversion of the old wildlife display area to a backyard habitat exhibit, a cooperative effort of I&E, Outdoor Education and Non-Game Wildlife. A gentle sloping walkway replaced the 8-foot high fence to open up the area of plantings and landscaping, attractive to both humans and wildlife.

In the "Old Town" area, the Wildlife Division moved into the booth previously occupied by the G&PC Foundation, which moved to the area that was previously the Parks "store." The Wildlife Division cabin was moved to a more convenient location near the waterfowl pond.

Space was provided to 14 outdoor/conservation organizations in the "Outdoor Alley," the aquarium and Hunter Education building. The shooting booth again proved highly popular with young people.

### Volunteer Waterfowl Stamp

The division coordinates the annual volunteer waterfowl stamp, produced by Neal Anderson. The 1993-94 stamp featured canvasback ducks, while the 1991-1992 (first issue) depicted Canada geese. The 1992-93 stamp portrayed a pair of pintails. Thus far, these stamps have raised approximately \$500,000 for wetland habitat in Nebraska.



### Habitat Stamp Art Contest

John R. Meyer of Grand Island won the adult division of the 1993 Nebraska Habitat Stamp, and his gray partridge will be featured on the 1994 Habitat Stamp.

There were 1,738 entries in the three categories in the Youth Division of the contest — 757 in the elementary section, won by 7-year-old Dan Haley of Gretna; 816 in the junior section, won by 13-year-old Phillip Mullen of Lincoln, and 165 in the senior category, won by 17-year-old Lynnette Rowell of Falls City.

The Omaha Fish and Wildlife Club again donated \$350 in awards to the contest — \$200 to the adult winner and \$50 each to the youth winners.

### Special Projects

Four tours were conducted, serving 176 participants, during the 15th season of the popular KNOW NEBRASKA TOURS, still co-sponsored with the Omaha World-Herald.

### Publications

The division manages the production and distribution of more than 400 different brochures and various other publications and forms used by the agency. They range from full-color brochures to one and two-color pamphlets, stationery and short-run technical publications.

I & E staff provides assistance to other divisions to determine the best,

*During 1993, I&E Mail Room handled 576,577 pieces of mail, including packages, at a cost of \$183,962.86.*



most cost-effective and efficient ways to produce the agency's numerous publications and various other printed projects. Work involves jobs bid to commercial vendors, coordination with the DAS Print Shop and those produced in the Commission's own printing facility.

### In-House Print Shop

The print shop produced 787 jobs in 1993, including pamphlets, booklets, news releases, survey cards, envelopes and other material. The 2,950,257 printed impressions included 88,915 cards, 301,500 envelopes and 2,559,816 pamphlets and other publications. Numerous negatives and plates were shot for printing various publications, plus all the related tasks of cutting, folding, collating, inventory and equipment maintenance jobs.

### Mail & Shipping

The mail section processes all incoming and outgoing agency mail by the most efficient method. More items were sent via U.S. Mail, rather than United Parcel Service because of UPS rate increases.

The direct address and bar code printer, acquired in 1991, expedited processing database mail, while also allowing the agency to take advantage of U.S. Postal Service discounts. First class pre-sort resulted in a savings of \$5,596.82 for the year. Mail processed in each category included: First class pre-sort, 141,937 pieces; regular mail, including metered bulk, 255,549; pre-printed bulk permit mail, 200,586, and UPS packages, 8,505. Postage/shipping costs for all categories was \$183,962.86 for a total of 576,577 pieces. There were 12,467 information requests filled.

### Art Department/Multi-Media

Several new brochures were added and others updated. Art Section did the layout for *NEBRASKAland Magazine* and the new endangered species inserts that are overprinted for use by Wildlife Division.

Displays for both manned and unmanned use were designed and built for a variety of shows, including State Fair, the Omaha and Lincoln sport shows, and a host of other exhibits.

In the Multi-Image area, a new "Stockholders' Report," showing the impact of hunting, fishing and parks on the economy, was done for use by the director at various meetings.



*Tina Rohrs works on one of the hundreds of jobs assigned to the Commission's in-house print shop each year.*



# LAW ENFORCEMENT

Enforcing the laws and regulations pertaining to fishing, hunting, boating and the state parks system, in this era, is a vital part of management. Effective natural resources law enforcement can be divided into three categories. Education demonstrates the purpose and need for existing laws and regulations; selective law enforcement allows officers to concentrate their efforts where specific problems are occurring, and general enforcement concentrates on prevention and control of violations in an officer's individual patrol area.

Officers are mobile and well-equipped. They are trained in the operation of radio-equipped trucks, boats, snowmobiles, and, at times, aircraft. They strive to maintain high visibility, which in itself serves to educate and to deter unlawful conduct to benefit of Nebraskans and the resource.

For 1993 the Law Enforcement Division had a maximum compliment of 62 positions, including a division administrator, an assistant administrator, six supervisors, 51 field conservation officers, a Boat Law coordinator, a Hunter Education coordinator, an administrative secretary and a staff assistant.

## On Patrol

Conservation officers drove a total of 1,572,463 miles on patrol, at an average cost of 10.06¢ per mile, including all operating expenses such as gas, oil, tires and repairs. The average was 15.4 miles driven per gallon of gas. Patrol boats were used 993.5 hours to promote boat safety at an average cost of \$12.79 per hour. Snowmobiles used for enforcement purposes were driven 288 miles at an average cost of \$2.92 per mile.

## Contacts

During 1993 officers checked 26,639 hunters; 51,927 fishermen, and 434 trappers. Some 16,072 boats were inspected, and 47,866 miscellaneous contacts were made, mostly park oriented. There were 3,044 complaints investigated, and officers attended 1,074 meetings.

## Arrests & Convictions

In 1993, there were 3,508 arrests, involving 3,813 violations, compared to 3,722 arrests in 1992 and 3,808 in 1991. Of this total 3,349 individuals were found guilty by the courts — for a conviction rate of 95.46% for all arrests and citations issued. The rate for cases actually brought to trial was 99.54%.

## Expenses

Total expenses for 1993 were \$80,413.75, including \$46,662.03 for meals; \$14,264.67 for lodging; \$14,094.65 for telephone, and miscellaneous \$5,392.40.

## Mandatory Road Checks

Conservation officers manned eight mandatory road checks during 1993 that resulted in 3,223 vehicles checked with 64 arrests made.

## Communications System

The statewide agency radio communications system involved a network of bases and repeaters, which allow radio contact between district offices, mobile to office, and mobile to mobile. Operating expenses in 1993 totaled \$10,590.41 mostly for installation/removal of radios, scanners, lights and other equipment. These expenses do not include costs incurred by other divisions for operation, maintenance or replacement of mobile or portable radios.

## Hunter Education

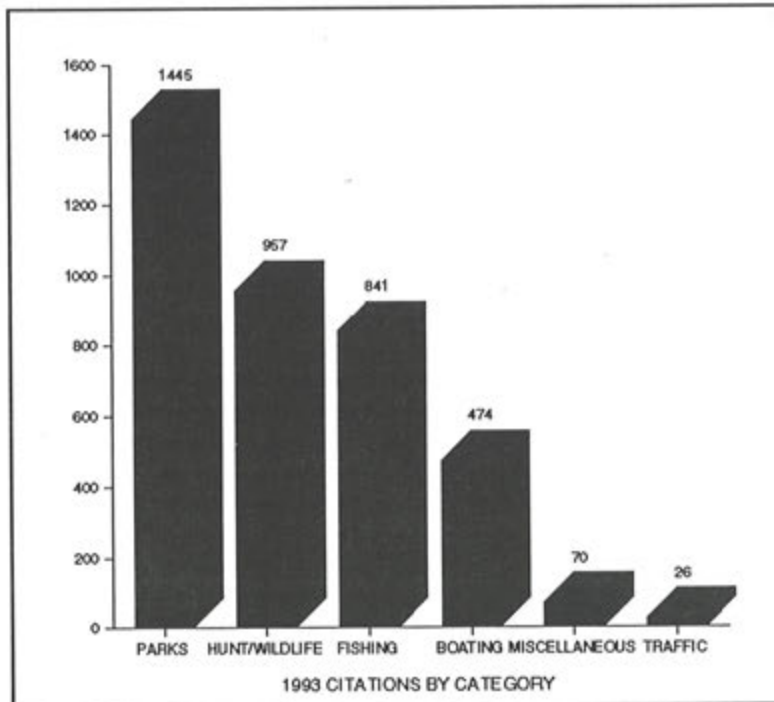
Hunter Education volunteer instructors certified 5,359 students in 365 classes during 1993, bringing the total to 147,692 since the program's inception in 1972. A total of 145 new instructors were certified at nine workshops held across the state.

Bowhunter Education became mandatory on Jan. 1, 1993, and 1,124 students were certified, nearly half of the 2,427 certified in Nebraska since 1977. Some 185 Bowhunter Education instructors were certified at ten workshops.

Participation at the 24th annual Cornhusker Trapshoot, sponsored by the Commission, at Doniphan included 29 squads of junior high students and 51 squads of senior high students.

The silhouette shoot at Pressey drew 64 shooters to participate in the team and/or individual competition.

A singular educational video was produced during the year. Designed to enhance students' learning of lessons taught in HE classes, it stresses fire-arm safety, hunter ethics and wildlife conservation. Entitled *A Path to Follow*, a copy will go to each student for home viewing.





## Boating

Major duties of the boating law administrator include directing the Boater Education program; coordinating updates in boating laws and regulations; liaison with the U.S. Coast Guard, submitting grant applications; processing boating accident reports and other reports required by the federal government.

In 1993, a comprehensive boating course, dealing with all aspects of boating, was developed and taught to 11 conservation officers.

A number of new boating laws went into effect, including those that defined a "personal watercraft," exempted sailboards from PFDs, made it a crime to use a vessel to flee arrest and for failure to stop for red/blue lights, and prohibits motor boating on four state waterfowl refuges from Oct. 15-Jan. 15.

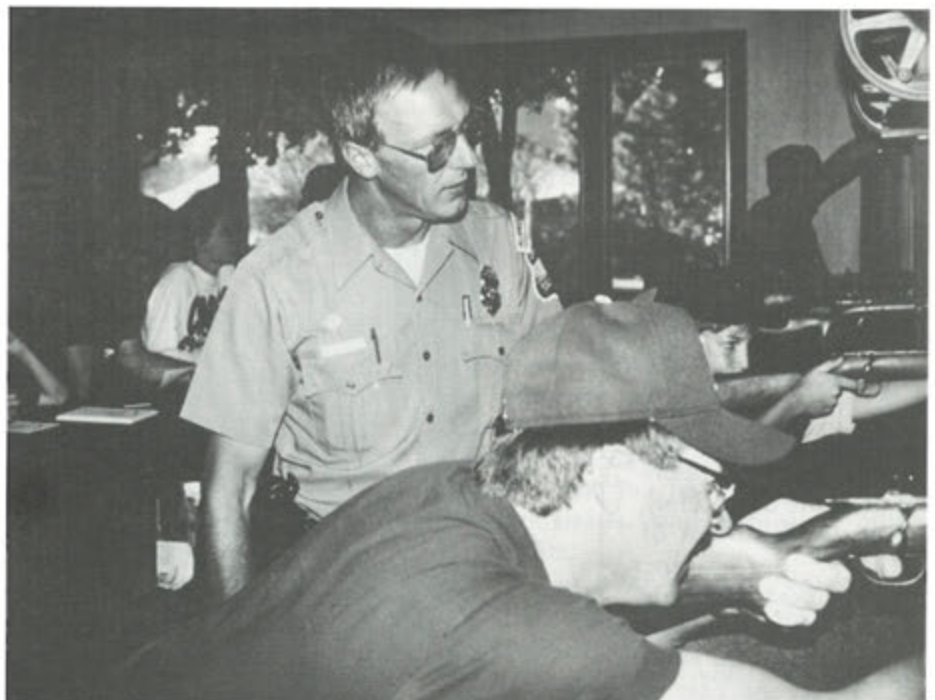
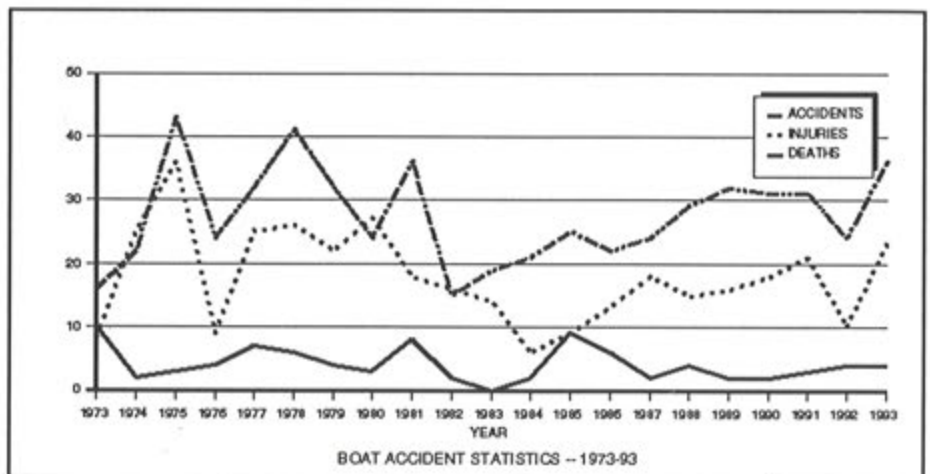
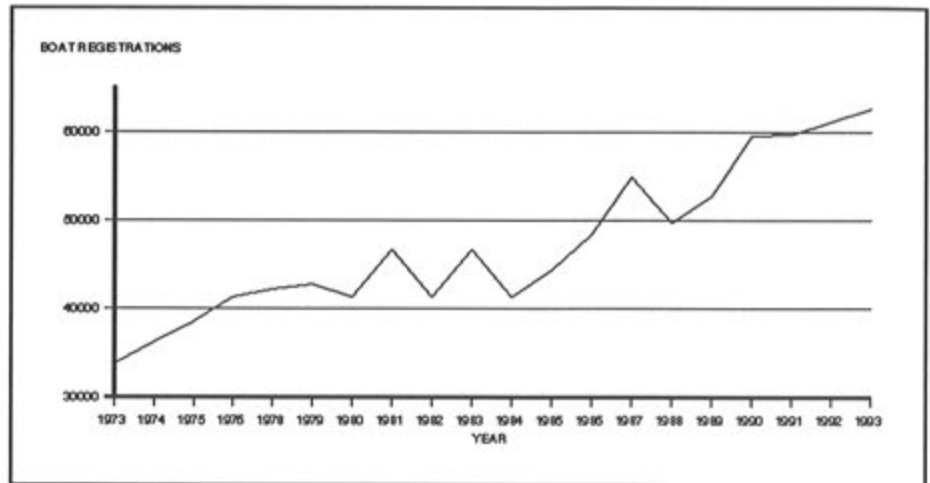
The number of registered motorboats continues to increase. There were 62,654 registrations in 1993, compared to 61,140 in 1992. The 1993 registrations nearly doubled the 33,843 figure recorded in 1973.

Although motorboats in Nebraska have increased over the years, accidents, injuries and fatalities have remained fairly constant. During 1993, there were 36 accidents with 23 injuries and 4 fatalities. The 10-year average is 3.8 fatalities, which is amazing since water areas have remained relatively constant. In fact, there were eight deaths in 1973, when there were 46% fewer motorboats plying Nebraska waters.

Over 1,000 *Nebraska Boating Basics* (boater education) manuals were distributed in 1993, primarily for use in the home, and many insurance companies offer discounts to those who complete this home study course.

A total of 37 permits for marine regattas were issued during 1993, down from 45 the previous year.

Nebraska received over \$125,000 in federal matching funds through the U.S. Coast Guard to fund boating programs in 1993. These funds are matched 50-50 by state money.



C.O. Bill Krause of Auburn assist shooters at State Fair Hunter Education range.



# OPERATIONS & CONSTRUCTION

This division is responsible for providing personnel and equipment to assist other divisions with construction, maintenance, transportation and warehouse services.

Duties are assigned to two sections:

## Operations

This unit provides personnel and equipment for the daily supervision, operation and maintenance of unmanned areas. Responsibilities also include the establishment of tree nurseries and maintaining a tree transplanting program, assisting with regulation enforcement, public contact relating to unmanned areas, and providing and manning an equipment and material supply warehouse for the Parks Division.

## Construction

This section provides personnel trained in construction and heavy maintenance skills to supervise and operate heavy equipment and install and maintain utility services, as well as personnel trained in building trades and crafts to supervise and assist with construction, renovation, and repair of agency building facilities.

## General Activities

During 1993, the division maintained a staff of 32 full-time and 70 seasonal employees. Many of the seasonal workers were hired at the job site or maintenance area to reduce travel and lodging costs to the agency.

The division staff operated from offices and shops at 2200 N. 33rd St., 3019 Apple St. and 3001 Y St. in Lincoln, plus North Platte, McCook, Fort Robinson and Grand Island.

This year, personnel from Y St., Apple St. and Pawnee SRA worked together to construct a new shop and office

building at Pawnee Lake. By December, the exterior of the building, heat and electric service were completed. Work on the interior will continue through the winter, with completion scheduled for May 1, 1994.

It was a year of record rainfall and severe flooding. Louisville SRA was perhaps the hardest hit with almost 200 trees down or severely damaged, causing the area to be closed during the busy summer season.

Operations and Louisville employees, along with a local logging company, worked many hours during July through December removing the large trees and stumps, regrading roads and camping pads, cleaning up, landscaping and reseeding to return the area to normal.

Although Eugene T. Mahoney State Park remained open to the public during the heavy rain and flooding, it sustained severe damage to lowland facilities. The dam and lake pumping station, located on the area's only flowing creek, were completely destroyed, along with a foot bridge connecting the tent camping area to the rest of the park. Temporary repairs were made to supply the area's two lakes with water until the permanent pumping facility can be rebuilt during the spring of 1994.

## Transportation & Equipment

A wide variety of equipment, such as air compressors, water pumps, tree spades, stump cutters, tar kettles, tractors, trucks, and loaders, was provided to area superintendents for temporary use to complete numerous projects. Bulk purchases of maintenance supplies were delivered to the Lincoln Operations Shop, inventoried, and transported to most park areas.

Gasoline and diesel fuel were provided for agency



Operations and parks crews and private contractors worked hard to get Louisville SRA back in shape after heavy wind damage.



vehicles from pumps at Y St. and included 40,777 gallons of gasohol, 12,043 gallons of diesel, 168 quarts of oil and 261 gallons of antifreeze. Average cost per gallon was .921 for gasohol and .858 for diesel.

Equipment purchased included: a Ditch Witch trencher; Champion motor grader with scarifier; Ford (diesel) crew wagon w/utility body; GMC one-ton pickup; used tandem-axle trailer; steam cleaner; portable generator; portable Mig welder; paint sprayer; frame/trim saw; 3" diaphragm pump; snow plow for single axle dump truck; computer printer; furnace for Y St. shop; two automatic levels with tripods and level rods; cable-type drain-cleaning machine; portable oxygen/acetylene torch kit; roto-tiller; 10" table saw, and a chain saw with 30" bar.

### Road Maintenance

Personnel and equipment headquartered in Lincoln, McCook, North Platte, Fort Robinson, Wildcat Hills, Valentine and Grand Island provided maintenance on over 300 miles of agency non-hard surfaced roads and parking areas.

### Projects & Services

Force account projects and services provided to various areas included:

**Arbor Lodge** — Cleared fence line on new property; remodeled office and constructed closet.

**Ashfall** — Installed 240 feet of 12-inch corrugated polyethylene pipe down the back slope to correct erosion problems in the Rhino Barn area; installed flagpole.

**Branched Oak** — Made electrical repairs in camp ground; constructed boat storage building for Law Enforcement.

**Calamus Fish Hatchery** — Constructed lobby display and two interpretive display panels; installed backflush valves and electrical service on filter system in the hatchhouse.

**Catfish Run** — Removed flood damaged fishing pier from Salt Creek.

**Dead Timber** — Regraded and surfaced camping pads and roads damages by flooding with rock and gravel.

**Fairgrounds** — Constructed arbor for the renovated wildlife area; paint and repair of exhibit area.



Students enjoy new Calamus Hatchery lobby displays, completed during 1993.

**Fort Robinson** — Constructed director's office and remodeled actors' practice area at the Post Playhouse; installed plumbing fixtures in cabins and lodge; remodeled superintendent's residence in lodge; completed repair of 1991 flood damage; installed underground electrical service to adobes and bricks; covered old refuse pit and excavated new refuse pit.

**Johnson Lake** — Constructed boat storage building for Law Enforcement.

**Lake McConaughy** — Installed culverts for roads and pit toilets, constructed road to camping area and a parking area for the handicapped.

**Lincoln Offices** — Constructed computer work station and refinished desk for Resource Services; constructed display case in Lab building for Wildlife Division; constructed matching tables, display panels, and lighted displays for the airport for I & E Division.

**Long Pine** — Built road entrance and parking lot for archery range; fenced roadway, installed guard posts around parking area and surfaced with gravel.

**Mahoney** — Built five picnic shelters and latrine addition to fish cleaning station; completed construction of theater; installed aeration system on US West Lake and ice machine at Riverview Lodge; made changes in Kiewit Lodge food service area; constructed large and small playgrounds and basketball court; installed lawn sprinkler system at lodge, theater and marina; improved horse trails.

**Niobrara** — Repaired flood damage to Old Town boat ramp.

**Oliver Reservoir** — Covered and landscaped dump.

**Pawnee Lake** — Upgraded the Lakeview campground entrance road; repaired/upgraded electrical service to campground.

**Platte River** — Replaced concrete floors and made ADA adaptations in shower building; constructed portable cash register stands; remodeled Scott Lodge food service area; improved horse trails with gravel surfacing; installed crossover pipe and valve at reservoir for additional water to fill swimming pool.

**Riha Road** — Repaired flood-damaged entrance road and parking area.

**Rock Creek Hatchery** — Built addition to assistant superintendent's residence.

**Sacramento-Wilcox** — Built addition to assistant superintendent's residence.

**Smith Falls** — Constructed and surfaced with gravel interior roads and parking areas; completed Phase I of boardwalk to falls; installed trailer residence and deck for trailer; started construction of shower building and two picnic shelters.

**Southwest Reservoirs** — Regraded and gravel surfaced 11 miles of roadway — Swanson, 2 miles; Red Willow, 5 miles; Medicine Creek, 2 miles; Enders, 2 miles.

**Two Rivers** — Repaired caboose interior wall paneling; replaced three latrine roofs.



# OUTDOOR EDUCATION

This division has been undergoing some major changes, with the promotion of Division Administrator Noelyn Isom to assistant director. Foremost was the transfer of Hunter and Bowhunter Education to the Law Enforcement Division.

Consequently, Project WILD and various other outdoor education activities comprised the main duties of the division during 1993.



Frank Andelt and Suzanne Ridder help folks select their trees at Arbor Day tree giveaway.

## Project WILD

The role of Project WILD in the environmental education efforts of the agency continued to grow in 1993. As part of the largest and longest-running education program in the world, nearly 8,000 teachers and resource workers have been reached through Project WILD workshops in Nebraska since the program was initiated in 1985.

The Project WILD school site habitat program was enhanced significantly in 1993 with a \$6,000 Action Grant from National Project WILD. Nebraska was one of 25 states to receive such a grant. In turn, the funds were allocated to 10 school site grants for development of wildlife habitat and outdoor classrooms during 1993.

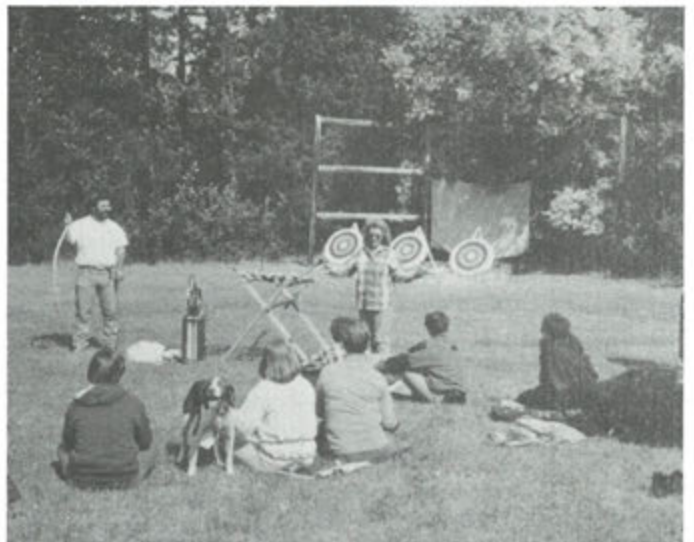
Project WILD continued to provide "starter" packages of native wildflower and grass seed for prairie restoration sites, as well as special habitat packages of native wildflower and grass seeds for prairie restoration sites and special habitat packages of native trees and shrubs for school site plantings.

Several advanced Project WILD workshops for teachers wanting college graduate credit were held during the year. A new six-day advanced workshop focused on Sandhills biodiversity, and teachers measured vegetation, visited fens and looked at water quality parameters in the northern Sandhills area.

## Other Activities

Various other activities dealing with environmental and outdoor awareness and skills included:

- *Trail Tales*, a wildlife education newspaper for fourth graders, continued publication and distribution to all elementary schools in the state.
- New wildlife species were added to the series on Nebraska Wildlife.
- The second *Becoming an Outdoors-Woman* workshop was held at the Nebraska National Forest at Halsey, and continued to be an important and well-received education component of the agency. Some 115 women attended the 1993 workshop.



Everybody but the dog seems to be wrapped up in Andy Glidden and Rose Robinson's archery session at the "Becoming an Outdoors-Woman" workshop at Halsey.

Planning was begun for the first Conservation Education workshop to be held in Kearney in February 1994. The first time instructors in the Commission's various education programs will have an opportunity to interact, the workshop is open to Hunter and Bowhunter Education, Project WILD and Aquatic Education instructors.



# PARKS

Responsible for administration and operation of Nebraska's system of state park areas, the division provides resource protection and enhancement to assure quality outdoor recreation experiences for present and future park users.

During 1993, the division converted to a system of regional managers, dividing the state into three units — Northwest, Central and Eastern. The three managers are responsible for management of all park lands in their areas. In addition, the reorganization involved reassigning other duties. The old position of chief of state parks was converted to division administrator of planning and development, and a position of division administrator of parks administration was created.

The Park System includes 87 areas totaling 141,978 acres — 67,070 acres of land and 74,908 acres of water or marsh. Within the system are eight state parks that total 29,902 acres; 68 state recreation areas, encompassing 109,696 acres, and 11 state historical parks covering 2,380 acres.

To maintain and operate these areas, the Commission employs a permanent staff of 135 people, including 120 superintendents and maintenance personnel plus 15 support staff, supplemented by 755 temporary employees. Some 49 areas, with 8 satellite areas, are staffed by 97 permanent on-site personnel. The remaining 23 field positions maintain the 30 unmanned areas. Parks personnel also assist with maintenance on 21 wildlife areas, with walleye egg stripping, deer check stations, tours and law enforcement.

Some 744 temporary, seasonal employees assist the parks staff during the peak recreation season. Several areas used volunteer services of local groups, historical hobbyist and campground hosts.

The Sign Shop handled a variety of signs and displays, ranging from new park entrance and interior signs

to State Fair and exhibits for areas like Calamus Fish Hatchery and the Smith Falls visitor center.

## Repairs & Improvements

A number of areas were damaged by strong winds in June and July, as well as by heavy rains and flooding. Indian Cave State Park had mud slides that required closing the road to the cave, with losses and repair costs estimated at \$500,000. Most areas have been cleaned up, but repairs will continue through 1994.

Rock Creek Station, Fort Kearny, Buffalo Bill Ranch and Ash Hollow, all key stops on the Oregon Trail, participated in the 150th anniversary celebration of the trail.

Major improvements at various areas included:

- Repainted exteriors of cabooses at Two Rivers SRA.
- Asphalted access road to Rock Creek Station SHP and main campground at Branched Oak.
- Handicap-accessible fishing piers installed at Oliver and Walgren.
- Began construction of shower building and two group picnic shelters at Smith Falls.
- Riding stables being built at Indian Cave and Chadron.
- Office/maintenance building under construction at Pawnee.
- Lake McConaughy interior roads and beach access are in process of being realigned.
- Another 30,000 trees planted by Volunteer Foresters at Fort Rob.
- Walkway at Smith Falls completed by area staff and Operations crews, with donation of materials and time by Telephone Pioneers of America.
- 2.1-mile walking trail and fishing pier begun adjacent to Niobrara State Park.

## Horticulture & Landscape

During 1993, staff prepared landscape designs and gave technical advice on a variety of projects.

- Redesigned older plantings around

Oliver Reservoir and the lighthouse at Lake Minatare.

- Landscaped the new shower buildings at Ponca and Fremont.
- Residential landscaping at Meridian and Cornhusker WMAs.
- Butterfly garden designs developed for Indian Cave, Mahoney and Platte River state parks.
- Designed and helped install backyard habitat display for State Fair exhibit area.
- Helped Chadron SP staff plant materials from nursery at Ash Hollow in the new campground.
- Several native grass and wildflower planting were done on several park and rec areas.
- New low-maintenance roadside seedings made at Merritt, Smith Falls and Chadron.
- Various size prairie areas were seeded at Branched Oak, Willow Creek, Fremont, Calamus, Pawnee and Enders SRAs and Meridian WMA.
- A record was made of all plantings done to date at Mahoney State Park.
- Clean-up operations at Windmill and Fort Kearny SRAs.
- 900 shade trees from Branched Oak nursery distributed throughout the park system, with other 1,000 planted in root-control bags for distribution in 1994.
- 1,500 containerized shade trees grown at Mahoney greenhouse.
- Assisted with transplanting 300 field nursery pines and shade trees from Rockford Lake to various recreation areas.
- 300 donated 5-foot Scotch pines transplanted to several agency areas in southeast Nebraska.
- Assisted Arbor Lodge with work on older, historically valuable specimen tree in arboretum.

## Planning

Planning to solve particular design problems was undertaken for Niobrara, Indian Cave, Smith Falls and Mahoney state parks; Lake McConaughy, Atkinson Lake, Mormon Is-



land and Lewis & Clark SRAs and Arbor Lodge SHP.

### Capital Construction

Capital construction authority for FY 1993-94 totaled \$900,000 in state funds and \$75,700 in federal money, earmarked for general park area improvements, Mahoney SP, Wildcat Hills and Lewis & Clark SRAs, with \$200,000 going to ADA improvements and \$60,000 for emergency repairs.

Park structure renovations were done at Ponca SP, Two Rivers and Windmill under Building Renewal funding (309 program).

Total budget for all park-related programs and activities for 1993-94 is \$14,576,412 with 41.5% coming from cash funds and the remainder from the general fund.

### Visitation

During 1993, visitation at state parks was estimated at approximately 9 million people.

There were 17,432 registrations at the eight park areas with cabins, involving 79,753 people staying for 253,238 days for an average of 4.58 days per stay. While park registrations (-4.8%) and numbers of people (-4.4%) were down from 1992 figures, guests tended to stay longer and cabin usage rose nearly 3%.

The impact of the cool, wet weather in 1993 is obvious in statistics from fee camping areas. There were 72,039 registrations (compared to 87,367 in 1992), with 224,390 participants, totaling 589,106 camper/days.

Park visitors spent \$245,046 to enjoy park trail rides, \$243,471 on boat and other recreational equipment rentals, and \$140,591 on swimming. Camping fees totaled \$954,184, while Park Entry Permits brought in \$990,101. Revenue collected from all fees, services and facilities at the state parks totaled \$7,402,748, up \$23,862 from the previous year.



*Caspar Yost Chapter of Telephone Pioneers of America built walkway at Smith Falls State Park.*



*Nail-pounding contest was just one of many Sod House Sunday activities that drew folks to Bowring Ranch State Historical Park.*



*Visitors enjoy caboose "cabin" at Two Rivers SRA.*



# PLANNING & PROGRAMMING

Major responsibilities of Planning and Programming include administration of several federal grant programs, comprehensive planning, special studies, local planning review, water resource project monitoring and environmental review of federally assisted developments here.

## Land and Water Conservation Fund

The Land and Water Conservation Fund Act of 1965, as amended, provides 50% federal grants-in-aid to the states and their political subdivisions for comprehensive planning, acquisition and development of public outdoor recreation areas. LWCF is supported by sale of surplus federal property and revenue from off-shore petroleum leases with about 85% coming from off-shore leases.

In fiscal 1993, Nebraska received \$270,903 of which 60% or \$162,542 was allocated to eight local, government-sponsored projects. Some 40% or \$108,362 was used for three Commission projects.

During the past 28 years, the federal government, state and local communities have invested more than \$75 million in new and improved outdoor recreation facilities under this program in Nebraska.

## Comprehensive Planning

The update of the 1991-1995 State Comprehensive Outdoor Recreation Plan (SCORP) Assessment and Policy Plan involves seeking public and agency input and review. Cooperation continues with the Midwest Regional Office of the National Park Service to assure that project proposals meet SCORP requirements for participation in the federal Land and Water Conservation Fund matching grant program.

One major SCORP planning effort involved an inter-agency effort to produce a State Trail Plan. The Commission, Department of Economic Development (DED) and Department of Roads (DOR) are the lead agencies working with the Governor's Policy Research and Energy Office under an energy grant. A consultant was hired to integrate the numerous state trail planning efforts and to bring the public into the process. The plan will be published in 1994. Representatives of various user groups sit on the committee to help foresee and offer solutions to problems.

Two other major trail initiatives were assigned to Planning — Nebraska's Trail Development Assistance Act and the National Recreational Trail Fund Act. Both allow trail funding projects of just under \$100,000. NRTFA funded a grant for the 2-mile trail and fishing bridge at Niobrara State Park. Three trail projects were funded under the NTDA with a 50-50 match with local funds.

The SCORP update highlights the accomplishments of Nebraska's long-term partnership with the U.S. Department of the Interior to expand outdoor recreation and trail opportunities for Nebraskans and their visitors by more than \$75 million in LWCF projects.

The Quality of Life Survey, done again in 1993, is being used to help quantify Nebraskans' participation in a variety of outdoor recreation, particularly trail-related activities and development of the State Trail Plan.

## Federal Aid to Fish and Wildlife Restoration

The Federal Aid in Wildlife Restoration Act of 1937 and the Federal Aid in Sport Fish Restoration Act of 1950 are companion programs to provide financial assistance to states for restoration activities. Administered by the U.S. Fish and Wildlife Service, the Wildlife Program is funded by an 11% excise tax on arms and ammunition and a 10% excise tax on handguns and archery equipment, while money for the Sport Fish Program comes from a 10% excise tax on fishing tackle and equipment.

During 1993 these programs made more than \$5 million available to Nebraska for fish and wildlife surveys and inventories, research, land acquisition, development and maintenance, technical assistance, hunter education training and aquatic resource education. Since their inception, the programs have contributed more than \$70 million to sport fish and wildlife programs in Nebraska.

## Resource Monitoring

Commission staff evaluated potential benefits of projects proposed by the U.S. Army Corps of Engineers, Soil Conservation Service, Bureau of Reclamation, Nebraska Natural Resources Commission and Nebraska Department of Roads.

The "404" Permit program, administered by the Corps allows the agency, along with others, to evaluate proposed developments affecting streams and wetlands and provide input on the effect on fish and wildlife habitat.

A major effort in 1993 involved the continuing review of the Federal Energy Regulatory Commission relicensing of hydropower facilities on the Platte River — Kingsley Hydro, Lake McConaughy and the Central Nebraska Public Power and Irrigation District (Tri-County).

Nebraska continues to participate in the Missouri River Mitigation Project Steering Committee with three other states to address environmental concerns surrounding the channelized Missouri River from Sioux City to St. Louis. Corps of Engineers, with assistance from the U.S. Fish and Wildlife Service and the four state conservation agencies, will evaluate land/water units that may potentially improve habitat for fish, migratory waterfowl, furbearers and other wildlife. Chute restoration (flow-through), dike modifications and water-level controls are among features under consideration.

Several Soil Conservation Service small watershed projects, Natural Resources District proposals in a number of communities across the state, power-line corridor studies, airport facility development and numerous state/county highway and bridge projects were among ongoing activities requiring Commission participation.



# REALTY

The Realty Division is involved in land acquisitions, appraisals, lease renewals, payments and cancellations, appraisal reviews, negotiations and public hearings on an ongoing basis.

Activities carried on during the year included:

- 22 appraisals reviewed — 12 under contract and 10 by staff. Nine staff appraisals were done for the Land and Water Conservation Fund.
- 22 tracts were appraised — 11 contracted and 11 done by staff. One of the tracts was purchased during the year, with options to purchase nine others. The remainder are in various stages of negotiation or are no longer being considered for acquisition.
- 11 tracts taken before the Habitat Committee or Fish Access Committee and Administration were turned down for acquisition.
- 123 tracts have been purchased and designated wildlife management areas since 1977, when the Habitat Program began. The taxes and in-lieu of taxes paid in 1993 amounted to \$76,970.06 on 24,654.8 acres.

Public hearings were held on all acquisitions as required by state law.

## Leases

The Commission currently leases 75 areas through the Realty Division at an annual cost of \$120,537.50. See chart for recap of leases and their cost.

1993 LEASES	
LEASE LOCATION	COST
Accessway	\$ 420.00
14 canoe campsites	3,377.00
Habitat, fisheries, grazing and recreation areas	35,740.50
Office space in Lincoln, Omaha and Kearney	6,900.00
19 storage areas	23,977.60
18 radio towers	13,672.40
Work areas	35,050.00
Hanger space	660.00
Post Office boxes	340.00

## 1993 ACQUISITIONS

RIVERSIDE GREENWAYS		
AREA	COUNTY	ACRES
South Sioux City	Dakota	36.01
WILDLIFE MANAGEMENT AREAS		
Dogwood	Dawson	133.42
Grove Lake	Antelope	262.54
Pintail	Hamilton	115.10
Margrave	Richardson	46.80
Parshall Bridge	Boyd	105.25
Taylor's Branch	Pawnee	240.00
Kiowa	Scotts Bluff	326.00
Mulberry Bend	Dixon	160.00
Kissinger Basin	Clay	341.04
Hidden Marsh	York	120.00
Frye Lake	Grant	215.26
Frye Lake	Grand	134.67
<b>TOTAL</b>		<b>2,236.09</b>

Wildlife land acquisitions and leases benefit game and non-game species alike, while providing wild places for outdoor enthusiasts.



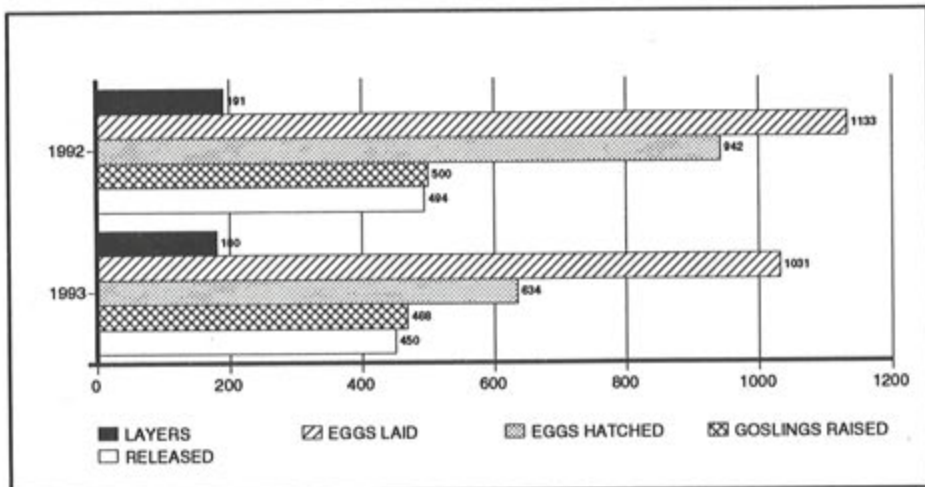


# RESOURCE SERVICES

Primary responsibilities are development, improvement and maintenance of wildlife habitat, lands and facilities on wildlife management areas and administration of the Wildlife Habitat Plan. The division is also responsible for management of:

- Captive waterfowl flocks
- Elk, buffalo and bighorn sheep herds
- Controlled hunting areas at Clear Creek and Schilling
- Nest box management
- Technical land reconnaissance
- Facilities for sporting dog training and field trials and administer dog clubs and trials
- Coordination with and assistance to other governmental agencies and groups
- Technical assistance to landowners, various outdoor groups and individuals.

Waterfowl Harvest & Hunter Use On Clear Creek WMA Controlled Shooting Area — 1972-1993				
Year	Hunters	Hunter Days	Goose Harvest	Duck Harvest
1972	852	1,589	128	493
1973	814	1,985	109	427
1974	613	1,398	54	128
1975	449	942	84	147
1976	752	1,880	295	135
1977	856	2,087	314	239
1978	742	1,519	237	146
1979	634	1,387	125	198
1980	725	1,426	271	132
1981	610	1,467	328	102
1982	634	1,522	209	85
1983	377	796	160	41
1984	498	1,263	222	84
1985	305	743	223	61
1986	600	1,663	474	34
1987	626	1,494	204	50
1988	596	1,404	233	31
1989	550	1,466	353	95
1990	635	1,552	353	27
1991	576	1,580	300	64
1992	580	1,169	137	42
1993	555	1,378	297	117
Average	610	1,443	230	131
Last 10 Years	532	1,311	266	53



GOOSE PRODUCTION AT SACRAMENTO

During 1993, numerous improvements were made on approximately 42,000 acres on wildlife management areas, including planting 87 acres of trees and shrubs; numerous grass-legume seedings; sweet clover and food plot plantings (corn, grain sorghum, soybeans and sunflowers).

## Dog Trials & Activities

During 1993, 28 organized dog clubs were listed on the state roster, 5 more than 1992. Three of them maintain training areas on private lands. The Commission has four authorized training areas and one field trial area on state land.

There were 64 trials held during the year, with 19 held at Branched Oak, 10 at Yankee Hill and 1 at Sherman Lake. In addition, there were 21 fun trials and one national trail. There were 1,708 dogs entered, and nearly 6,000 people attended the various events.

## Clear Creek WMA

Although large numbers of Canada geese are drawn here each year, the numbers appear to be declining over the past several years and is most apparent during the late part of the hunting season. Nearby Garden County Refuge is hosting increasing numbers of birds in December and January, likely because of the quality of roosting habitat, food supplies and/or hunting pressure. The new check station facility was well-received by hunters. Clear Creek also

offers quality hunting for white-tailed deer, turkey, pheasant and other small game. The area also contributes to the protection of several nongame species, most notably the river otter, migrating whooping cranes and wintering bald eagles.

## Sacramento

The Canada goose hatch was 61.5% compared to 83.1% in 1992. Of 180 nests, 135 were successful. Of the 45 unsuccessful nests, 12 were abandoned, 8 were flooded and 25 were incubated but failed to hatch. All eggs were left in the nests to be hatched by the geese. First goslings hatched May 1 and the last by June 10. There were six nests where both geese were free-fliers and 29 where one of the parents was free-flying.

## Schilling WMA

With heavy July rains and three weeks of floods, the outlook for fall hunting was rather bleak. However, after dry-out began, debris was cleared. Some 200 acres of winter wheat were planted, offering some browse to migrating birds. Flooded areas not planted were covered with barnyard grass, which birds used on mild days. Lesser snow goose production was down, as it was in 1990-92. However, the adult:young ratio was 1:1, much improved from the 10:1 recorded in 1992. Refuge tours were limited by poor roads, due to the summer floods. Only one adult tour was conducted for 45 people, plus two student groups of 15 each.

1967-93 HARVEST FIGURES — RANDALL W. SCHILLING WMA								
YEAR	SNOW GEESE	BLUE GEESE	OTHER GEESE	DUCKS	BIRDS RETRIEVED	BIRDS LOST		TOTAL KILL
						GEESE	DUCKS	
1967	379	264	94	63	807	72	9	888
1968	53	37	6	10	106	26	6	138
1969	258	161	14	29	452	86	9	1,000
1970	554	309	35	39	940	170	14	1,124
1971	238	179	47	37	501	131	13	645
1972	293	141	6	36	476	131	20	627
1973	754	399	22	10	1201	178	2	1,381
1974	497	287	15	12	803	134	7	944
1975	562	334	32	31	959	107	3	1,069
1976	155	82	1	26	264	28	2	294
1977	268	175	19	12	474	68	4	546
1978	294	174	44	68	580	93	11	684
1979	239	135	6	26	406	90	3	499
1980	108	74	1	4	187	58	3	248
1981	243	125	11	4	383	52	0	435
1982	239	112	10	14	375	44	1	420
1983	81	66	4	11	162	40	1	203
1984	270	102	6	3	381	44	3	428
1985	89	42	6	8	145	38	3	186
1986	211	127	18	21	377	59	4	440
1987	97	63	10	5	175	30	2	207
1988	161	87	1	5	255	45	1	301
1989	100	59	3	0	163	25	0	188
1990	142	98	10	3	251	41	1	293
1991	59	21	5	13	98	7	1	106
1992	61	43	3	9	116	29	0	145
1993	39	19	1	1	60	13	0	73

## HABITAT PROGRAM UPDATE

During the 17-year existence of Nebraska's habitat program some \$8,818,374 has been spent on habitat improvements on Commission-owned or controlled lands. Funding comes from the sale from the Habitat Stamp, authorized by the Legislature in 1977.

At the end of 1993, the fund balance was \$3,625,389. Average annual expenditure for the 17-year period was about \$1.75 million. Funds are spent about equally in three areas: Habitat protection or improvement on private lands, acquisition of wildlife lands, and habitat improvement and management on Commission-controlled wildlife areas and on public lands not controlled by the Commission. Although habitat continues to decline, it is happening at a much slower rate than in the 1960s and 70s. However, credit for much of this should also go to federal farm programs that began in the mid-1980's.

Only five permanent positions are funded by the Habitat Fund. All are field personnel. Some of them spend a little time on wildlife management area activities, but most is spent coordinating the private lands efforts within their assigned districts. The division administrator, secretary, and 34 other permanent positions are funded by the Game Fund.

### Private Lands Actions

Private lands projects are administered primarily through the Natural Resources Districts (NRDs), with expenditures of about \$550,000 annually. Where NRDs do not cooperate, contracts with private landowners are handled directly by the Commission at a 75% funding level. Only three NRDs do not participate — Lower Big Blue, Middle Niobrara and Lower Loup. Cost sharing has been 75% Commission and 25% NRD, and NRDs have contributed approximately \$2,747,259 to this program. Some 1,210 landowners have enrolled 23,433 acres, with 34.4% of them open to hunting.

### Wildlife Shelterbelt Program

Initiated to assist landowners establish large shelterbelts for habitat, tree planting began in the spring of 1990. Participants receive financial incentives that cover nearly all costs. To qualify shelterbelts must be at least one-quarter mile long and have five or more rows of trees/shrubs. To date some 45 shelterbelts have been planted, covering some 16½ miles and 319 acres at a cost of \$113,829 through 1993.





Controlled burning is one of the tools used to enhance habitat.

### Wetlands Initiative

A pilot program, approved by the Board of Commissioners in 1992, offers financial incentives to encourage restoration, enhancement or creation of shallow water wetlands. Initially efforts focused on two main practices — reimbursing landowners for costs of restoring, enhancing or creating shallow water wetlands and adjacent upland habitat to benefit of waterfowl and other wildlife species and secondly providing a one-time payment for enrollment in the federal Water Bank program. Although statewide in scope, emphasis is on the Rainwater Basins and is a preliminary effort toward achieving the goals of the North American Waterfowl Management Plan. Some \$64,920 were expended through 1993, resulting in the protection and/or creation/enhancement of 483.2 acres of wetlands and 1,414.4 acres of adjacent upland.

### Wildlife Land Acquisition

By the end of 1993 some 28,360 acres of land, water, and marsh have been acquired under this program at a cost of \$12,089,920. The Habitat Fund paid \$11,428,705, while \$661,215 came from the Game Fund. Average cost per acre was \$426.

### Habitat Development & Management

Of 145,087 acres managed for fish and wildlife purposes, the Commission owns some 69,619 acres, with an additional 75,468 acres leased mainly from the federal government, irrigation districts and NRDs. Some 125,000 trees/shrubs were planted per year on WMA's from 1977 through the mid-1980's to catch up with woody cover deficiencies. Since then, plantings averaged about 30,000 plants per year, with many on newly acquired areas.

Planting volume of grasses, grass/legume mixtures, pure legumes, and small food plots may vary, but it averaged 400 to 500 acres seeded annually. Some plantings were perennials, while food plots were annuals. In addition, crop plantings averaged 5,500 to 6,500 acres of per year. Some was harvested, while the rest was left standing for wildlife.

Other development/management activities, many done on an annual basis, included: Prescribed burning for habitat improvement; fencing; noxious weed control; construction of ponds for wildlife and erosion control; construction and maintenance of access roads and trails, and signing.

### Habitat Development On Other Public Lands

Harlan County Reservoir — Major habitat improvements were completed by 1986. Since then, some \$10,000 to \$12,000 per year has been spent on minor improvements and habitat maintenance for a total of \$936,735 on 14,332 acres of land. Some 200,000 trees/shrubs have been planted, all of them fenced to delineate public lands from private lands. Five shallow wildlife water developments were constructed on perimeter lands. Although relatively close to a large water impoundment, wildlife use has been surprisingly high. Aerial seeding of millet on exposed mud flats provides fall/winter feeding areas for waterfowl, but pheasants are also attracted to these seedings.

U.S. Forest Service Lands — Some \$220,269 has been spent to date on habitat improvements on forest lands at McKelvie near Valentine, Bessey near Thedford and forest lands near Chadron. Since primary use of USFS lands is grazing livestock, fencing is necessary to prevent damage. In some cases, fencing existing habitat, including some natural wetlands, was all that was needed.

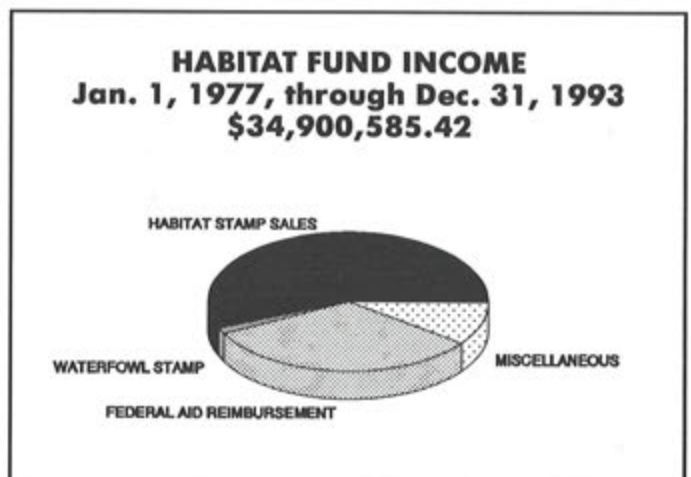
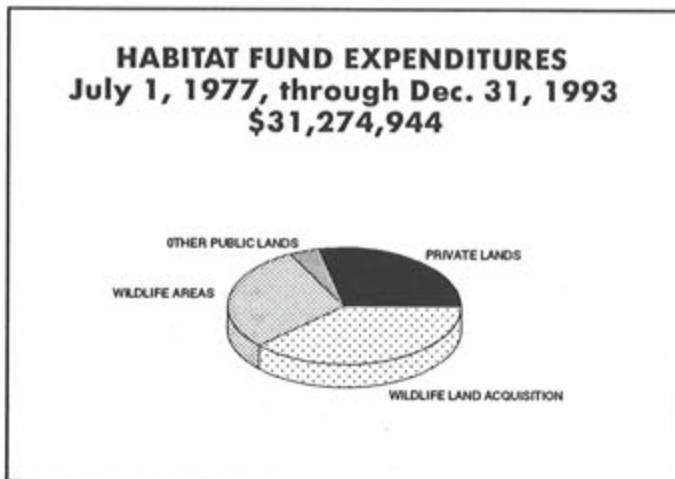
U.S. Fish & Wildlife Service Lands — Some \$35,374 was spent in 1993 for habitat work on these lands, with a total of \$378,636 in the past 17 years. Early on, expenditures on USFWS waterfowl production areas were limited to pumping selected basins during the fall improve attraction to migrating waterfowl and to try to disperse high waterfowl concentrations that contributed to fowl cholera losses. In the early 1980's, expenditures were expanded to improve habitat for resident game species.

County Roadside Seeding Program — To date, \$622,761 went to provide seed mixtures to counties for use on new or newly graded county roadsides. In return, the county agrees to limit mowing and spraying of these roadsides. Goals are (1) to establish perennial roadside vegetation to prevent or reduce soil erosion and (2) to provide roadside nesting habitat, primarily for pheasants. Some 37 counties have seeded some 20,353 roadside acres (4,347 miles) at an average cost for seed of about \$38 per acre over the 17 years of the program. One mile of county roadside right-of-way includes about five acres.

Living Snowfence Program — Offered for the last 11 years, interest in this program has never been high and has declined of late. To date, \$164,094 has been expended on this program. In 1984-85, the Commission provided \$38,967 to the Nebraska Department of Roads to plant and fence several experimental living snowfences adjacent to state highways. Since then, DOR has funded and carried on their own living snowfence program.

<b>HABITAT FUND INCOME</b> <i>Jan. 1, 1977-Dec. 31, 1993</i>		
YEAR	HABITAT STAMP INCOME ONLY	TOTAL INCOME*
1977	\$ 755,872.50	\$ 763,545.91
1978	1,121,610.00	1,457,849.77
1979	1,188,802.50	1,810,201.40
1980	1,233,756.00	2,439,334.71
1981	1,366,882.50	2,527,621.15
1982	1,221,952.50	2,249,502.74
1983	1,187,602.50	1,652,017.58
1984	1,014,480.00	1,876,555.57
1985	1,008,750.00	2,541,834.39
1986	1,070,707.50	1,423,691.41
1987	1,107,577.50	1,587,615.70
1988	1,130,017.50	1,966,481.63
1989	1,112,212.50	1,934,021.46
1990	1,101,607.50	2,628,024.96
1991	1,206,778.00	2,656,157.09
1992	1,370,793.50	2,578,733.22
1993	1,528,800.00	2,807,396.73
<b>TOTAL</b>	<b>19,728,202.50</b>	<b>34,900,585.42</b>

\* Total Income includes Habitat Stamp sales, federal aid reimbursements, interest, gifts, sales of Voluntary Waterfowl Stamp and incidentals.





# WILDLIFE

This division is responsible for developing research and management programs associated with game and nongame mammals and birds, which are categorized as: Big game, upland game, waterfowl, furbearers, and nongame, threatened and endangered.

## Research

Work continues on activities requiring laboratory use — chemicals, supplies and projects for other divisions, as well as in presentations and law enforcement forensics. This involves species identification of meat, blood, bone, hair, feathers or scales; time and cause of death, sexing of deer, pheasant or turkey. Recently identification of fish fillets has become increasingly important.

The major activity in 1993 was completion and publication of the 180-page field manual for "Identification of Selected North American Freshwater Fish by Fillets and Scales." Of the 5,000 copies printed, 4,500 copies were requested and sent to state and federal agencies.

## NONGAME

### River Otters

While efforts to re-establish river otters in Nebraska were completed in 1991 when the last releases were made on the Elkhorn and Niobrara rivers, 1993 efforts involved monitoring otter sightings, documenting mortality and an aerial survey in February to document otter sign near the release sites.

Of 25 otter observations received in 1993, two are considered confirmed with 20 probable. One confirmed report was a family group on the Platte River. Three otter mortalities involved one animal killed by a vehicle and two accidentally trapped. One of the trapped otters was an untagged animal, taken along the Platte River, probably an offspring of a released animal.

Although snow conditions were good during the aerial survey, little sign of otters was found anywhere.

Reasons for this are not known. The large number of otter reports received, presence of untagged animals and family groups are positive signs of a successful reintroduction.

### Bald Eagle

Three bald eagles each fledged from a nest on the Middle Loup River in Sherman County and one in Scotts Bluff County. Eighteen other potential nest sites were monitored, where bald eagles have shown some of nesting or courtship activity. The mid-winter eagle survey, recorded 698 bald eagles along streams, lakes and reservoirs. An average of 694 bald eagles have been surveyed annually from 1988-1992.



### Peregrine Falcon

Efforts begun in 1988 were rewarded in 1992 by the first successful nesting of peregrine falcons in Nebraska since the turn of the century. In 1993, that successful female returned to Woodman Tower in Omaha and again laid three eggs. The eggs were infertile, though, and the attending male, whose origin was undetermined, disappeared. The infertile eggs were removed; replaced with dummy eggs, then replaced with two captive hatched peregrine chicks. When the chicks were not accepted by the female after three days, they were returned to the breeding facility. A week later, a new male showed up and spent the rest of the summer with the resident female. This banded male had been released at the Woodman site in 1989. These activities provided many hours of educational and entertaining viewing to Woodman Tower visitors

via a video camera overlooking the nest platform and linked to a monitor in the lobby.

A male peregrine falcon again established a territory at the State Capitol in Lincoln and was observed courting several females, but no nesting occurred. One female, raised on Woodman Tower in 1992 and sighted last fall, did not return to the Capitol this spring. Instead, she mated with a male in Cleveland and raised young there.

### Kestrels

The Sierra Club of Omaha and the Raptor Recovery Center of Lincoln monitored 47 kestrel nest boxes on the back of I-80 signs between Omaha and Seward. Eleven were used in 1993, fledging 35 young.

### Bluebirds

The 1993 Bluebird Directory registered nearly 150 Nebraskans. Since 1989, nesting summaries from 67 counties have been received, reporting on the success of over 2,500 nest boxes being monitored in the state.



### Least Tern & Piping Plover

Nesting surveys of least terns and piping plovers were conducted on the Loup, Middle Loup, Elkhorn and Platte rivers. Preliminary totals indi-



cate 607 terns and 283 plovers were found along the Platte, 161 terns and 33 plovers along the Loup rivers and 38 terns and 8 plovers along the Elkhorn River.

Efforts were made to alleviate conflicts between on-site operations and the nesting birds at 10 lower Platte, 3 Elkhorn and 3 Loup river tern and plover colonies at sandpits. Nearly 50 volunteers assisted in protecting tern and plover nesting colonies from disturbances. Stationed at several colony sites, they handed out brochures, answered questions and provided needed surveillance.

and federal agencies were reviewed for impact on endangered and threatened species. Potential adverse impacts of some projects on endangered and threatened species were averted through the cooperation of project sponsors and appropriate state and federal agencies modifying proposed projects. Natural Resource District groundwater management plans were reviewed.

### Natural Heritage

Nebraska's Natural Heritage continues to collect, update and disperse information on rare species

for the scenic and recreational rivers.

Surveys continue to determine the status of bats using abandoned rock quarries in southeast Nebraska as summer roosts and winter hibernation. Five abandoned quarries are being used by at least three species of bats, including the uncommon eastern pipistrelle.

Monitoring continues on red-shouldered hawks nesting in Fontenelle Forest. Two adults were observed there from March to June, but no nest or young were sighted. While a red-shouldered hawk was observed in Dodge County 1992, none of these hawks were seen during a spring survey there.

Two adult mountain plovers were observed in Kimball County during surveys there and in Box Butte County for these threatened birds.

Numerous observers continue to report nongame wildlife, with over 300 observations sent in during 1993. Many of these involved species being tracked by the Heritage Program and have been added to the database. The rest are maintained in manual files for future reference.

Funding was received from the U.S. Fish and Wildlife Service to survey the Elkhorn River for the federally endangered Higgins' eye pearly mussel. Over 150 sites were studied. Although seven species of unionid mussels were found, including one specimen of the rare pond mussel, no Higgins' eye pearly mussels or their habitat were found.

A major project, the Nebraska Pesticide Protection Program, was initiated under a contract with the EPA. The Federal Insecticide, Fungicide and Rodenticide Act restricts the use of pesticides near populations of threatened and endangered species. The EPA has typically used labels inform landowners about restricted areas. As an alternative, the Commission developed a landowner agreement for threatened and endangered plant species. Objective was to obtain an annually renewable agreement with affected landowners to restrict the use of pesticides within a prescribed area around protected plants. Agreements can be modified



Whooping cranes visit Sacramento-Wilcox Wildlife Management Area.

### Whooping Cranes

Each spring and fall migrating whooping cranes are monitored and stopover sites evaluated. In the spring, 31 cranes in eight groups stopped in Nebraska between April 9-17. Six probable and seven unconfirmed sightings were reported. In the fall, there were eight confirmed sightings, involving 21 individual cranes, six probable and seven unconfirmed sightings.

### Endangered and Threatened Species

Over 300 proposed land and water development projects requiring permits or authorization from state

and natural communities here. To date, 4,612 species and natural community occurrences have been processed. Records are being collected on some 600 species of plants and animals and 50 natural community types. There have been 30 requests for heritage data.

The database provided rare species and community information to the National Park Service for their GAP Analysis Project on stretches of the Niobrara and Missouri rivers that have been designated or proposed for Scenic River classification. Staff was also instrumental in completing the rare species/habitat correlation, used by the NPS to set boundaries



to accommodate specific conditions of an individual landowner.

Blowout penstemon recovery efforts continued, with over 5,000 greenhouse propagated penstemon seedlings transplanted to three research sites, the first phase of a three-year research project to determine the best management practices to maintain penstemon populations.

Surveys and monitoring were continued on the blowout penstemon and western prairie fringed orchid. While no new penstemon populations were found, use of standardized survey methods and data collection forms will provide more accurate and consistent data. Three new populations of western prairie fringed orchid were discovered — two in Cherry County and one in Sarpy County.

### **Platte River Instream Flow**

Commission personnel finalized Platte River flow recommendations to protect habitat for a variety of nongame, game, threatened and endangered species. Five applications for water rights were filed with the Department of Water Resources, requesting instream flow rights in river reaches from Lexington downstream to the Platte's confluence with the Missouri River. Hearings will be conducted 1994 before approval or denial of the applications.

### **Endangered Species Series**

NEBRASKAland Magazine introduced a series of "liftout" brochures featuring the state's endangered species in December 1992, with publication of "Nebraska's Vanishing Species." In 1993, liftouts featured the river otter, blacknose shiner, western prairie fringed orchid, pallid and lake sturgeons, bald eagle and three species of dace.

### **Cooperative Conservation**

Grants totaling \$5,000 were awarded to 12 nongame species conservation projects — up to \$500 per project, designed to plant and protect habitat for a wide variety of nongame animals; provide outdoor classrooms that include habitat plant-

ings and wildlife educational materials for elementary schools; restore tall-grass prairie; provide bluebird and kestrel nesting boxes, develop wildlife habitat interpretation trails and signs, and develop backyard wildlife habitat.

## **GAME**

### **Wetlands**

The abundant rain and flooding in 1993 caused most Nebraska wetland complexes to look the best they have in 20 years. This was especially noticeable in the Rainwater Basin and the Southwest Playas regions. However, the flooding caused considerable damage and underscored the need for more wetland areas to reduce future flooding. In response, the U.S. Department of Agriculture implemented the Emergency Wetland Reserve Program.

The Rainwater Basin Joint Venture entered its fifth year. Progress has been made toward project goals, but private lands projects in the Basins continue to be difficult to come by. To date, 2,156 acres of wetlands have been acquired, 212 acres of wetlands restored and nearly 5,000 acres have been included in private lands or Water Bank programs.

In September, the Sandhills Management Plan was signed and printed, the result of public agencies and ranchers developing a working partnership. It includes strategies on education, technical assistance, acquisition, legislation, financial support and lease agreements.

The Commission has teamed up with the Department of Environmental Quality and Natural Resources Commission to develop the Nebraska Wetlands Conservation Plan to develop a plan to help conserve and enhance wetlands in Nebraska and improve the efficiency of wetlands programs and decision making. Much of the plan will be based on public comments received at the 13 workshops held throughout the state. It is targeted for completion in 1995.

The multi-agency Saline Wetland Assessment Team worked toward completion of a resource categorization document and maps, and a

mitigation banking guidelines document. The 154 sites visited were categorized by plant community, soils, salinity, hydrology, and degradation.

Late in 1993, staff began working with the U.S. Soil Conservation Service and Lower Platte South Natural Resource District on the Rock Creek Cooperative River Basin Study to identify factors degrading saline wetlands along Rock Creek and target strategies to protect and restore the wetlands.

The Commission continues to cooperate with numerous governmental agencies, conservation groups and individuals on wetlands issues and projects. These include working with landowners to restore wetland habitat under the Wetland Initiative Program, responding to requests for information, reviewing permits, and giving presentations.

### **Rain Basin Shorebird Survey**

A multi-year survey of shorebirds in the Rainwater Basins began, coordinated by the Manomet Bird Observatory in Manomet, MA. Objectives include census and identify shorebirds using the Basins, determine migration chronology and define wetland types and conditions most favored by shorebirds. Eight sites, representing a variety of wetland types and water permanency, were chosen for the survey. Results for 1993 indicate high usage by shorebirds during spring migration, with 22 species identified during peak spring migration in May.

### **Furbearers**

Primary duties of the furbearer program include estimating annual harvest of 12 furbearing species, monitoring population trends of these species and investigating relationships between harvest, populations and harvest effort. The harvest is estimated through a survey sent to a sample of fur harvest permit holders.

Furbearer populations are tracked through field studies, lab work and mail surveys. Biologists must also keep abreast of local, national and international events that influence the demand for wild furbearer resources. Many factors from political conditions



in Europe to international economics to local storms influence fur prices.

### Deer

Hunter success and harvest increased slightly over 1992. Total take was 37,169 deer — 30,767 during the regular firearm season; 3,578 by archers; 2,183 by muzzleloader hunters, and 641 during special gun seasons. Success rates were below desired levels in the Northeast and above average in the Panhandle.

Highway mortality was not yet available for 1993, but from 1987-92 deer losses varied from 3,269 (1990) to 3,724 (1992).

### Antelope

Aerial surveys indicate antelope numbers decreased about 10%, with 4,800 pronghorns estimated in the Panhandle — about 61% in the North Sioux Unit with the rest of the range well below desired numbers.

In keeping with the 1989 antelope management plan, 198 pronghorns were trapped in Colorado and released in Sheridan County — 98 in January/February and 100 in December. Hunting will not be allowed in there for several year. Several species of were traded to Colorado for the antelope.

Archery hunters scored 16% success, with 77 antelope taken by 492 permittees. Archery participation has increased substantially in recent years from a previous high of 175 permits in 1984 to 263 in 1991; 412 in 1992, and 492 in 1993. Firearm hunting has been limited to allow herd recovery. Three units were open in 1993, and 577 pronghorns were taken by 710 permittees.

### Turkey

Production was normal in spite of cool wet weather. Production was excellent in 1987, but has been below normal since then except 1991 and 1993, which were average.

Spring hunting was similar to the past few years, with 38% of 9,774 gun permittees and 15% of 1,563 archers successful. Fall success was 50% compared to 46% in 1992.



Antelope trapped in Colorado were transplanted in Nebraska's Panhandle.

### Upland Game

Work pertaining to the pheasant management plan and its original recommendations included further work on a study evaluating response of pheasants, insects and early successional plants to discing; continued effort to bring Geographical Information Systems (GIS) into the agency, and initiation of a bibliography for all documents pertaining to upland game housed in the agency. Funding was approved by the EPA to

develop of a series of guides on "Reducing Pesticide Use to Wildlife".

Projects involving the gray (Hungarian) partridge management plan included release of wild-trapped gray partridge from a trade with North Dakota into range in the Panhandle. Although 200 birds were requested, North Dakota could supply only 13 birds. Information from over 260 statewide gray partridge observations were recorded.

Hunting range maps were com-

1992 & 1993 DEER - ANTELOPE - TURKEY SEASONS						
SEASON	PERMITS		HARVEST		% SUCCESS	
	1992	1993	1992	1993	1992	1993
<b>DEER</b>						
Archery	13,828	13,798	3,481	3,578*	25	26*
Firearm	52,989	54,402	28,729	30,767	54	57
Muzzleloader	4,744	5,701	1,761	2,183	37	38*
Special Gun	551	1,251*	305	641*	55	51*
<b>Total</b>	<b>72,112</b>	<b>75,152</b>	<b>34,276</b>	<b>37,169</b>	<b>--</b>	<b>--</b>
<b>ANTELOPE</b>						
Archery	412	492	95	77	23	16*
Firearm	656	710	598	577	91	81
<b>Total</b>	<b>1,068</b>	<b>1,202</b>	<b>693</b>	<b>652</b>	<b>--</b>	<b>--</b>
<b>TURKEY</b>						
Spring Archery	1,801	1,563	353	246	20	16
Spring Shotgun	10,278	9,774	4,345	3,672	42	38
Fall Archery	573	550	83	85	14	16
Fall Shotgun	6,361	5,518	2,945	2,764	46	50
<b>Total</b>	<b>19,013</b>	<b>17,405</b>	<b>7,726</b>	<b>6,767</b>	<b>--</b>	<b>--</b>

\* Preliminary figures, subject to change.



pleted for fall hunting seasons for pheasant, quail, grouse, and cottontail made available in the hunter information packet.

Thirty-five controlled shooting areas were licensed. Eight new permits were issued for controlled shooting areas, while four permits were not renewed.

Rural mail carriers again assisted in roadside surveys in April, July and October. Wildlife personnel conducted surveys of prairie grouse breeding grounds, assisted the U.S. Fish and Wildlife Service with a breeding population survey of mourning doves, did whistle count surveys of northern bobwhite, monitored pheasant, grouse and gray partridge broods, and manned voluntary check stations on the opening weekends of prairie grouse and pheasant/quail hunting. Grouse and quail wing envelopes were supplied to cooperators. Conservation officers and major permit vendors distributed opening weekend survey cards at the beginning of pheasant/quail season.

An roadside survey was partially implemented, with 15 routes run in the Sandhills to determine if this method could be used to better forecast the prairie grouse season. Few grouse were seen on these routes, indicating a need to reevaluate the

methods used.

Based on breeding ground surveys run the last two years in Harlan and Franklin counties, the open area for grouse hunting was expanded. The southern east-west boundary was moved from U.S. 283 to NE Hwy 10.

Reproduction for upland game this year was better than in 1992. Spring surveys showed breeding numbers of prairie grouse down, but fall hunter check station data indicated an increase in grouse production.

Spring and early summer pheasant and quail surveys indicated breeding bird numbers to be down. Data from the quail check station and opening weekend survey cards indicated an increase in birds bagged per day.

A cooperative project was begun with Kansas Wildlife and Parks, the Kansas Cooperative Wildlife Research Unit and South Dakota Game, Fish and Parks to evaluate the use of Conservation Reserve Program acres by pheasants in High Plains summer fallow wheat range.

### **Waterfowl**

The waterfowl program extends well beyond the season-setting process both in scope and time. Waterfowl are counted each January as part of a national survey. There were

157,000 ducks counted — 142,000 (90%) mallards, plus 65,000 Canada geese. The annual Central Flyway-wide white-fronted goose survey was not done due to the presence of large numbers of other geese, particularly snow geese, which created a hazard to the airplane and observers. Since the usual proportion of total white-fronted geese that occurs in Nebraska is more than 80%, no estimate of the spring population was made in 1993. However, a fall count in Saskatchewan indicated the population is healthy.

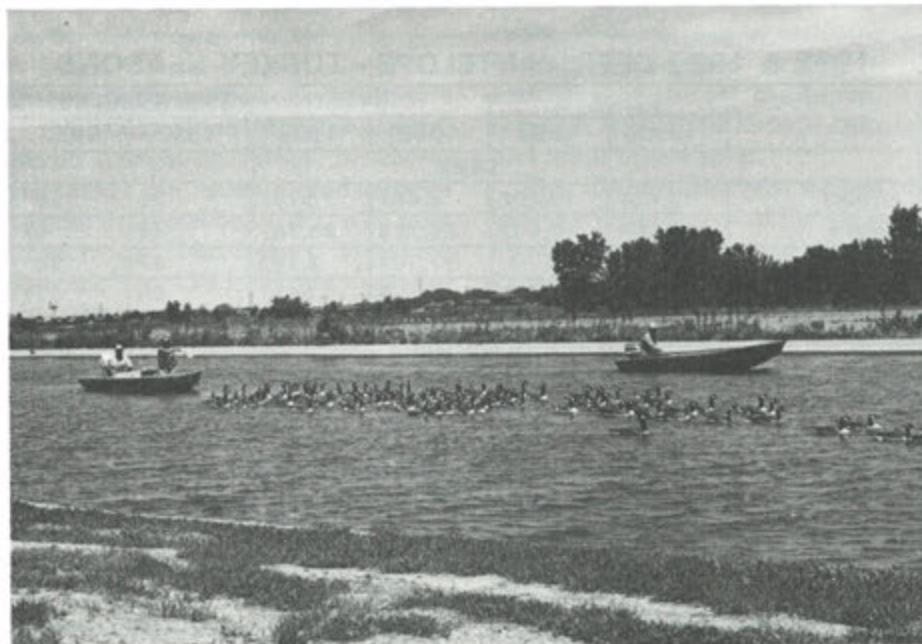
For the first time since 1975, waterfowl died from avian cholera in the Rainwater Basins. This was attributed basically to ample fresh water being available from winter precipitation and frequent rains during spring migration.

In 1993, the breeding population of ducks in the Sandhills was estimated at 93,000, slightly below average. Mallards comprised about 26% of the total. Other important species included gadwall and blue-winged teal. Summer estimates of Sandhills duck reproduction were considerably higher than in many previous dry years.

In the fourth year of a five-year program, about 900 Canadas were banded in the Sandhills. Over 200 previously banded birds were recaptured. About 450 goslings from the captive flock at Sacramento WMA were banded and released in the North Platte River valley under the last year of a ten-year Canada goose restoration plan for the area. Another 800 Canadas were banded at Lincoln and on nearby lakes. White neck collars were put on 253 of these birds as part of a three-year study learn about distribution of Canadas. In total, leg bands were put on about 2,300 Canada geese over a four-week period.

In 1993, 90,700 Canadas were counted during the December flyway-wide aerial survey.

There were no major changes in the waterfowl hunting regulations for the 1993 seasons.



*Goose banding operations help biologists manage populations for the benefit of the birds and the hunter.*





