

National Refuge System growing

By Bill Schulz
Associated Press Writer

Stretched like a string of pearls across the continent, the 487 pieces of land which make up the National Wildlife Refuge System provide havens for wildlife and recreation for millions of Americans.

"We've been adding about 200,000 acres a year to the system over the last decade, but more than half of that comes as additions to existing refuges," says Robert J. Shallenberger, chief of the U.S. Fish and Wildlife Service's Division of Refuges. "The average is about 10 new refuges a year."

The smallest is Mille Lacs, an island in a Minnesota lake, which is an important bird nesting area. The largest are the Yukon Delta and Arctic refuges in Alaska, at 20 million acres apiece. They make up a big part of the 91 million acres of land in the entire system.

The first refuge was Pelican Island, established in 1903 by President Teddy Roosevelt, who added 50 more by executive order.

With the dedication of the Ohio River National Wildlife Refuge in West Virginia on May 28, 1992, the refuge system reached all 50 states. The system receives 30 million visi-

tors a year. Twenty percent are hunters, the rest are there for wildlife watching or other "non-consumptive" use of wildlife.

Some refuges offer fishing and a very few, such as Chincoteague, offer recreation such as swimming, which is not related to wildlife.

But for wildlife, "we've got refuges

established for everything from butterfly species to eagles," Shallenberger says.

None of the first 51 refuges were for hunting. Later in the evolution of the system refuges were created to allow places for hunting.

When the duck stamp program was created in the late 1930s, it brought

more money for refuges. Every hunter pursuing migratory waterfowl must buy and carry a federal duck stamp. Those license fees have bought 4 million of the 14 million acres of refuge lands in the lower 48 states.

Nearly 270 of the 487 refuges now are open for some hunting.

FOR YOUR COMPLETE HUNTING NEEDS

MOUNTAIN CITY

SERVING DEER HUNTERS

IN AREAS 6 & 7

ALSO

MALHEUR NATIONAL WILDLIFE REFUGE
WATERFOWL PRODUCTION

<u>YEAR</u>	<u>MALLARD</u>	<u>TOTAL DUCKS</u>	<u>CANADA GOOSE</u>	<u>TRUMPETER SWAN</u>	<u>TOTAL WATERFOWL</u>
1942	40,000	77,200	3,200		80,400
1943	45,000	89,200	3,500		92,700
1944	50,000	120,125	4,000		124,125
1945	40,000	109,900	5,000		114,900
1946	35,000	138,775	6,000		144,775 ✓
1947	25,000	94,360	4,000		98,360 ^o
1948	30,000	146,950	4,000		150,950
1949 ✓	20,000	111,665	5,000		116,665 ✓
1950	8,000	82,425	3,700		86,125
1951		62,035	700		62,735
1952		56,720	3,000		59,720
1953		30,000	4,000		34,000
1954		25,000	3,500		28,500
1955 ✓	8,000	67,830	4,000		71,830 ✓
1956	2,400	22,750	2,000		24,750
1957	4,500	26,310	1,900		28,210
1958	5,013	43,671	3,109	2	46,782
1959 ✓	600	5,600	1,300	0	6,900
1960	3,627	44,764	1,292	6	46,062
1961 ✓	1,755	7,375	960	2	8,337 ^a
1962	2,850	18,425	1,100	1	19,526
1963	4,155	29,225	1,400	17	30,642
1964	4,950	31,335	1,800	6	33,141
1965	5,000	37,000	1,150	10	38,160
1966	2,500	13,000	1,600	2	14,612
1967	1,900	22,800	1,950	12	24,762
1968 ✓	3,000	13,000	1,000	11	14,011 ^o
1969	2,130	23,200	1,500	14	24,714
1970	3,330	33,300	1,350	13	34,663
1971	6,540	44,900	2,400	22	47,322
1972	3,550	33,700	1,630	13	35,343
1973 ✓	2,000	13,300	630	4	13,984 ✓
1974	2,150	21,300	1,000	9	22,309
1975	2,898	18,052	812	7	18,871

trapping was reduced over the years, but than
completely eliminated when John Scharff left in
1971

Table 3. Breeding population estimates for 10 species of ducks, 1955-90 (in thousands)*.

Year	Mallard	Gadwall	American wigeon	Green-winged teal	Blue-winged teal	Northern shoveler	Northern pintail	Redhead	Canvasback	Scaup	
1955	10,345	1,106	3,333	2,076	6,436	1,965	9,251	733	595	7,100	total 42,940
1956	11,711	1,202	3,712	1,898	6,267	2,084	10,124	928	692	6,595	
1957	10,946	1,102	3,208	1,293	5,449	1,744	6,856	684	600	6,535	
1958	12,904	687	3,372	1,618	5,799	1,515	6,889	524	713	6,040	
1959	10,292	683	3,779	3,153	5,300	1,649	7,228	641	481	8,220	
1960	8,206	873	3,165	1,630	4,303	1,859	5,769	542	575	5,566	
1961	8,290	1,422	3,219	2,216	4,833	1,625	4,860	437	396	6,764	
1962	6,144	1,610	2,721	1,119	3,890	1,633	4,299	664	385	6,398	
1963	7,360	1,578	2,209	1,754	4,587	1,435	4,361	396	523	6,564	
1964	6,974	1,223	2,630	2,051	4,943	1,685	4,111	560	658	6,326	
1965	5,948	1,692	2,695	1,526	4,628	1,607	4,301	568	505	5,383	
1966	7,401	1,976	2,901	2,219	5,616	2,272	5,777	747	683	5,421	
1967	8,205	1,638	2,637	1,944	4,715	2,244	5,870	846	556	5,877	
1968	7,586	2,098	2,783	1,805	3,697	1,811	4,225	502	557	5,971	
1969	8,065	1,837	3,192	1,991	4,514	2,150	6,390	759	530	6,338	
1970	10,379	1,698	3,752	2,259	5,633	2,269	7,004	834	601	6,930	
1971	9,843	1,733	3,425	2,352	5,426	2,052	6,291	693	441	6,149	
1972	9,867	1,776	3,428	2,407	5,673	2,505	7,875	489	429	9,527	
1973	8,781	1,198	3,665	2,444	4,866	1,657	5,114	754	696	7,535	
1974	7,392	1,562	3,003	2,221	5,437	2,060	7,165	613	493	7,045	
1975	8,109	1,672	2,862	2,038	6,441	1,994	6,387	974	706	7,846	
1976	8,637	1,478	2,699	1,844	5,023	1,818	6,045	946	686	6,973	
1977	8,226	1,546	2,678	1,952	4,626	1,616	4,971	688	702	7,490	
1978	7,695	1,593	3,808	2,978	4,497	2,162	5,664	833	423	7,125	
1979	8,444	1,889	3,388	2,920	5,278	2,555	6,070	774	606	9,135	
1980	8,003	1,459	3,857	2,925	4,903	2,050	5,420	1,146	688	7,690	
1981	6,757	1,479	3,555	2,515	4,076	2,403	4,227	825	594	7,253	
1982	6,684	1,690	3,159	2,247	3,879	2,540	4,112	674	543	6,549	
1983	7,107	1,536	2,923	2,574	3,381	2,237	4,086	866	528	8,788	
1984	5,974	1,799	3,979	1,804	3,870	2,222	3,664	849	569	8,402	
1985	5,475	1,410	2,506	1,873	3,756	1,925	2,935	701	411	6,235	
1986	6,303	1,590	2,446	2,588	4,664	2,403	3,201	956	442	6,252	
1987	6,691	1,705	2,734	3,041	3,618	2,229	3,137	767	478	6,261	
1988	6,550	1,528	3,168	3,143	3,652	2,157	2,577	846	435	5,480	
1989	6,119	1,423	2,577	2,697	3,199	1,636	2,471	628	488	5,299	
1990	5,897	1,745	2,659	3,032	2,832	1,904	2,590	606	593	5,277	27,135
Goals**	8,700	1,600	3,300	2,300	5,300	2,100	6,300	760	580	7,600	
1955-89 Avg.	8,098	1,500	3,119	2,203	4,768	1,993	5,392	725	555	6,830	
Percent Change in 1990 From:											
1989	-4	+23	+3	+12	-11	+16	+5	-4	+22	NC	
1955-89 Avg.	-27	+16	-15	+38	-41	-4	-52	-16	+7	-23	

* All duck indexes adjusted for visibility bias.

** Breeding duck population goals, from North American Waterfowl Management Plan (FWS-CWS 1986).