UPPER MISSISSIPPI RIVER NATIONAL WILDLIFE AND FISH REFUGE

McGregor District McGregor, Iowa

ANNUAL NARRATIVE REPORT



Upper Mississippi River National Wildlife and Fish Refuge, McGregor District

McGregor, Iowa Fiscal Year 2004

Regional Chief, NWRS

INTRODUCTION

1. Location

The McGregor District is one of four districts comprising the Upper Mississippi River National Wildlife and Fish Refuge. The District Office is located at McGregor, Iowa with Refuge Headquarters at Winona, Minnesota. This District contains parts of Houston County, Minnesota (8,651 acres); Grant, Crawford, and Vernon Counties, Wisconsin (37,495 acres); Dubuque, Clayton, and Allamakee Counties, Iowa (32,038 acres) for a total of 78,184 acres. The District covers navigation Pools 9, 10 and 11 and is 97 river miles long, extending from Dubuque, Iowa to Genoa, Wisconsin. Adjoining or nearby public land areas are: 1) Grant River Public Use Area, Potosi, Wisconsin; 2) Nelson Dewey State Park, Cassville, Wisconsin; 3) Pikes Peak State Park, McGregor, Iowa; 4) Wyalusing State Park, Wyalusing, Wisconsin; 5) Effigy Mounds National Monument, McGregor, Iowa; 6) Yellow River State Forest, Harpers Ferry, Iowa; 7) Blackhawk Park, Victory, Wisconsin; 8) Genoa National Fish Hatchery, Genoa, Wisconsin; 9) Fish Farm Mounds State Park Preserve, New Albin, Iowa, and several smaller access areas.

The above acreage figures for the McGregor District have been used for many years. However, recent analysis with Geographic Information Systems has changed the acreage somewhat. The current acreage is 9617 in Minnesota, 44,411 in Wisconsin, and 37,475 in Iowa. Total acreage for McGregor District is then 91,503. This acreage will be used in the future for describing the District.

2. Topography

The Refuge lies within the Mississippi River Valley which is two to five miles wide and cradled between forested bluffs, rising up to 500 feet above the River. The elevation of the valley is approximately 600 feet mean sea level.

3. Points of Interest

The McGregor District contains no large cities, but small river towns flank the river throughout. Dubuque, Iowa, (2000 population 57,600) is located near the southern boundary of McGregor District. Rural homes and developments are increasing throughout Dubuque County, including areas adjacent to the Refuge. Commercial fishing, clamming, and furbearer trapping provide income for some residents along the Refuge. Sport fishing is the most popular recreational activity, occurring every day of the year. Waterfowl hunters may travel over 200 miles to participate in opening day hunts on the Refuge. As a migration corridor, the Mississippi River valley may be unsurpassed in significance.

4. Physical Facilities

The McGregor District Office/Visitor Contact Station (DO/VCS) completed in July, 1986 is located in McGregor, Iowa. Warehouse/storage areas are located at Cassville and Genoa, Wisconsin, and McGregor and Lansing, Iowa.

INTRODUCTION

Table of Contents

Highlights

	T.	age
1.	onitoring and Studies a. Surveys and Censuses b. Studies and Investigation	1
	b. Studies and investigation	NTR
2.	abitat Restoration	
۷.	a. Wetland Restoration	NTR
	b. Upland Restoration	
	c. Deep Water/Riverine Restoration	
	d. Environmental Management Program	
	•	
3.	abitat Management	
	a. Water Level Management	
	b. Moist Soil Management	
	c. Graze/Mow/Hay	
	d. Farming	
	e. Forest Management	
	f. Fire Management	
	g. Pest Plant Control	
	h. Other Habitat Management	Τ0
4.	ish and Wildlife Management	
7.	a. Bird Banding	NTP
	b. Disease Monitoring and Treatment	
	c. Reintroductions	
	d. Nest Structures	
	e. Pest, Predator and Exotic Animal Control	
5.	oordination Activities	
	a. Interagency Coordination	
	b. Private Lands Activities	11
_		
6.	esource Protection	
	a. Law Enforcement	
	b. Permits and Economic Use Managementc. Contaminant Investigation	
	c. Contaminant Investigationd. Contaminant Cleanup	
	e. Water Rights Management	
	f. Cultural Resource Management	
	g. Land Acquisition Support	
	h. Wilderness or Special Areas	
7.	ublic Education and Recreation	
	a. Provide Visitor Services	19
	b. Outreach	20
	c. Hunting	NTR
	d. Trapping	NTR
	e. Fishing	
	f. Other Public Use	NTR
8.	lanning and Administration	
	a. Comprehensive Conservation Planning	
	b. General Administration	
	c. Safety	
	d. Maintenance	25

	e.	Volunteers25
	f.	Personnel
9.	Wildl	
	a.	Endangered/Threatened Species27
	b.	Waterfowl27
	c.	Marsh and Water birdsNTR
	d.	Shorebirds, Gulls, Terns, & AlliesNTR
	e.	RaptorsNTR
	f.	Other Migratory Birds28
	g.	Game MammalsNTR
	h.	Other Resident WildlifeNTR
	i.	Fisheries ResourcesNTR
	j٠	Wildlife DiversityNTR
10.	Item	s of InterestNTR
11	Clim	matic Conditions 29

•

Highlights

```
Refuge staff observed record numbers of migrating bald eagles during the
last week of April (see 9.a.)
Bald eagle nest activity reaches all time high (see 1.a.)
Cassville Legacy Project students maintain forest (see 3.e.) and conduct
nest activity count for great blue herons (see 1.a.)
13,000 willow and cottonwood cuttings planted on two EMP islands (2.d.)
Flood destroys Cooperative farming unit (see 3.d.)
District conducts first ever Sobriety Check Point (see 6.a.)
Refuge Officer assists Secret Service with Bush/Kerry
Campaign stops. (see 6.a.)
Six new kiosks built at boat landings (7.a.)
Paddle wheel boats make a "Grand" return to the Refuge (see 7.b.)
Upper Miss River Fest in Prairie du Chien attracts 850 students (7.b.)
Comprehensive Conservation Planning ongoing (8.a.)
Mud fight anyone? Heavy rains cause mudslide at District office (8.c.)
Flooding closes Bertom Lake Boat Ramp (see 8.d.)
Trumpeter swan nests discovered in three locations (see 9.a.)
```

1. MONITORING AND STUDIES

1.a. Surveys and Censuses

The midwinter waterfowl survey was completed on January 7, during which we observed 1841 ducks and geese; primarily mallards and common mergansers. There was a large concentration of mallards and black ducks near the Lansing power plant. One cinnamon teal was observed at the Villa Louis pond in Prairie du Chien, Wisconsin. 351 mature bald eagles, 249 immature bald eagles and one golden eagle were also observed during the survey.

Informal Canada goose nest searches were conducted April 21-26 on four small (0.5 - 4.5 acre) islands and adjacent Sunfish Lake in lower Pool 11. Forty-five active nests were discovered. Average clutch size was 5.3 eggs per nest. A revisit to these same nests on May 5th revealed a 75% successful hatch rate, not including 7 nests that were still in incubation.

The bittern and rail surveys were not completed this year because survey sites were flooded.



Canada goose nesting on islands in lower Pool 11 is ready to defend.

Bald Eagle Survey

There were 77 active bald eagle nests on the District this year. The bald eagle production count was completed June 3, 2004. Forty-two nests were checked for production and 58 young were observed. Average eagle

production was 1.4 young per nest. This is compared to 74 bald eagle nests in 2003 with 53 young.

Frog and Toad Survey

The annual frog and toad surveys consisted of 20 survey points in Pools 9, 10, and 11. The sites were surveyed April 4, June 2, and July 14. Nine anuran species were encountered including the uncommon cricket frog. Three cricket frogs were detected at the Potosi Point site, Pool 11, Grant County, Wisconsin.

Colonial Nesting Birds

The activity phase of the colonial nesting bird survey for the McGregor District was completed by aerial surveys by headquarters biologist Eric Nelson. Additionally, the Pig Island rookery in Pool 11 was surveyed by a ground count. An active great white egret nest was observed within this rookery for the first time.

Six active rookeries were found on the District this year (Table 1). The total number of active great blue heron nests was 1,820 as determined from ground counts. Total production was estimated at 2,462 great blue herons.

The production count phase of the colonial nesting bird survey was completed June 14, 2004. Due to high water, a majority of the production survey was done by boat. 221 great blue heron nests were checked and 310 young were observed for an average of 1.40 young/nest.

Students from Cassville, WI assisted with counting Great Blue Heron nests at Pig Island rookery in Pool



Table 1. 2004 colonial nesting bird survey results. GBH=Great Blue Heron, DCC=Double Crested Cormorant

POOL	COLONY NAME	AERIAL PHOTO COUNT (nests)	GROUND COUNT (nests)	PRODUCTIVITY # Nests checked	Young/nest
9	Dairyland	140 GBH	n/a	25	1.36
9	Blackhawk	535 GBH 19 Great Egret	n/a	55 GBH	1.36
9	Lansing Dike	not active			
10	Butler Lake DCC, 59 Great Egret		n/a	66 GBH, 6 DCC	1.25 GBH, 2.0 DCC
10	Effigy	Not Active	Not active		
10	Methodist Lake West	162 GBH	n/a	10	1.10 **
10	Methodist Lake East	not active			
11	Goetz	39 GBH	n/a	14	1.07 **
11	Brinkmans East	not active			
11	Brinkmans West	no photo	not active		
11	11 Pig Island 393 GBH		*450, 1 Great Egret	51 GBH	1.8

^{*}Ground count used instead of aerial count to determine production totals.

Vegetation surveys

District personnel conducted aquatic vegetation surveys in Pools 9, 10 and 11, utilizing the AHQI or "Aquatic Habitat Quality Index" established by the UMRCC in 2002. The surveyed sites are scored based on an accumulation of points given per vegetation community, water depth, and substrate type. Areas surveyed were the Pool 9 Islands EMP project; McGregor Lake and Tilmont Lake in Pool 10; and the recently completed Sunfish Lake EMP Project in Pool 11.

McGregor (aka Sturgeon) Lake Fall Waterfowl Survey

For the second season, waterfowl surveys were conducted weekly (October through December) in McGregor Lake in Pool 10. Survey results will guide proposed EMP fisheries project development within the Lake, without impacting historical waterfowl use. Waterfowl use surveys of this area during October-November 2002 and 2003 indicate waterfowl use is low. The most abundant waterfowl were lesser scaup and common goldeneye. Peak populations of each were approximately 150. Coot numbers occasionally reached 100. Other water birds frequenting the area, in much smaller numbers (<50/survey), included: mallard, wood

^{**} Insufficient sample size

duck, double-crested cormorant, great blue heron, and ring-billed gull.



Aquatic vegetation in a backwater lake on the Refuge.

2. HABITAT RESTORATION

2.d. Environmental Management Program

The U.S. Army Corps of Engineers administers this habitat improvement program on the Mississippi River, in cooperation with the Refuge, other Fish and Wildlife Service divisions, and state resource management agencies.

The following EMP (Habitat Rehabilitation and Enhancement) projects are in progress on the McGregor District.

<u>Pool 11 Islands</u>, Brennen Construction, contractor for Rock Island District, U.S. Army Corps of Engineers contractor, completed Stage I (Sunfish Lake) of the Pool 11 Islands Project. Primary project goals are to reduce resuspension of sediments, increase flow and depth diversity, protect and increase diversity of aquatic vegetation, create deep off-channel habitat for fish, and reduce island erosion.

Stage I, the Sunfish Lake portion of the project included construction of a 1500 meter long, narrow peninsula (deflection embankment) from the Wisconsin shore at approximately river mile 584.5, southwesterly toward the navigation channel. The alignment was selected to utilize existing natural islands where possible. The head of the peninsula was notched to allow water flow. A system of channels (involving approximately 28 acres) was dredged south of the area protected by the peninsula.



Bank erosion occurring in black slough, Pool 10.

Stage II (Mud Lake) of the Pool 11 Islands project was also awarded to Brennen Construction this fiscal year. A preconstruction conference was held in September, 2004. Brennen began mobilization immediately and commenced construction of earth berms. Design of Stage II is similar to Stage I. A 2,965 meter long earth embankment will tie into the Iowa shoreline of the river near Mud Lake County Park (river mile 589.8) and continue southward, deflecting river current from Mud Lake (aka Zollicoffer Lake), an old, now submerged, backwater area of the Mississippi River. A series of dredge cuts will provide earth fill for berm construction and deeper water habitat. Construction is planned to continue until freeze-up, recommencing when conditions permit in spring, 2005.

Ambrough Slough (Pool 10) This is a St. Paul, Corps of Engineers project just north or Prairie du Chien, Wisconsin. The primary project goal is to enhance fish habitat, particularly over-winter habitat. Some portions of the project began as early as 2001, but delays due to contract disputes, archeological resource issues, and high water delayed project completion. The remaining (final) components of the project were completed during this (2004) fiscal year; all of the dredging components, including: Spring Lake, Big Missouri Lake and Upper Doubles Lake; and construction of the rock closing structure between Big Missouri and Upper Doubles Lakes. The rock, partial closing structure constructed at the entrance of black slough from the navigation channel continues to direct high water flow into the adjacent, downstream bank. This is causing excessive erosion of the bank.

<u>Pool Slough</u> (Pool 9) Efforts to initiate construction of this St. Paul COE District project continue at a stand still. Award of a "set aside"

contract was aborted because the Corps and selected contractor could not agree on a best price. Work is expected to commence in fiscal year 2004, and in delay another year.

A small scale draw down of pool 9 (six inches at dam 9) has been under consideration since 2003, but has been postponed pending resolution of concerns about archeological resources (which may be exposed by low water conditions) by the Iowa State Historic Preservation Officer. Also of concern are water depths at the barge off loading facility at the Lansing Power Plant, that may be insufficient for operations (according to Alliant Energy), particularly if a full scale draw down (2-3 feet) of pool 9 was implemented.

Planning for other EMP projects in the McGregor District, and elsewhere, were significantly reduced because of limited program funding to the Corps of Engineers, the lead agency. Other EMP programs in various stages of planning include: Conway Lake (pool 9), Capoli Slough (pool 9), and Harpers Slough (pool 9).

The McGregor staff, Living Lands and Waters, and US Army Corps of Engineers forester, Jonathan Sobiech, made a collaborative effort to plant an estimated thirteen thousand willow and cottonwood cuttings at Tilmont Lake peninsula in Pool 10, and Sunfish Lake Island in Pool 11 on March 16 and 17, 2004.

The crew gathered at the Quality Beverage site, Pool 10 and cut saplings prior to budburst. The cuttings were then loaded onto boats and taken to the EMP project sites to be planted. The cuttings were hand planted along the island shorelines one foot apart in checkerboard-like rows to help stabilize the bank from erosion and to benefit waterfowl.



Tree planting crew including McGregor District staff, Living Lands and Waters, and Corps of Engineers. Refuge employees shown: Neil Henkenius, Peter Ziegler, Jim Brown, Colm Young.



Cottonwood and willow planted on Tilmont peninsula, Pool 10.

3. HABITAT MANAGEMENT

3.a. Water Level Management

On September 28th water was pumped onto the 38 acre John Deere Marsh unit using the 6000 gallon/minute crisafulli pump. The pump was in operation for 35.6 hours. An estimated 12,816,000 gallons of water was pumped into the marsh. The gauge reading within the marsh at the start of pumping was 1.55 feet. The marsh had no standing water except for the area around the water control structure and the old river scour to the north prior to pumping. Gauge reading at the end of the operation was 2.18, which provided an average 8" of water in the marsh. Despite these favorable water conditions very little waterfowl use was noted within the unit, possibly due to hunting pressure in the area.

3.b. Moist Soil Management

Fall operations on the Guttenberg Ponds Moist Soil Units were delayed until November 8th due to repairs by the Corps on the Big Pond /East Unit water control structure. Waterfowl and other water bird migrants utilized the units until ice up on December 8th.

Spring water was brought onto the Guttenberg Moist Soil Units beginning March 4, 2004. Several uncommon yellow headed blackbirds were observed this spring in the moist soil units. An estimated 10,000 puddle ducks and 200 Canada geese, were observed utilizing the east and west moist soil units this year. The number of waterfowl recorded on Big Pond was 550 Tundra swans, 200 geese, and over 600 puddle ducks.

One of the District's Trumpeter swan nesting pairs returned to the Guttenberg Ponds area, and was observed in the west unit on May 27, 2004, with six cygnets.

3.d. Farming

A total of 255 acres were enrolled in the cooperative farming program this year. All coop farming was conducted by four cooperators in the Turkey River Bottoms (pool 11). Record spring flooding from the Turkey River destroyed the entire newly planted crop within the 70 acre Jason Bittner unit. Additional flooding occurred within the other units, but allowed the replanting of the fields after they dried out. It is unlikely that the Bittner Unit can be planted again without a considerable effort, including sand and debris removal and field leveling.



Bittner Co-op Farming Unit inundated by sediment as a result of the Turkey River flooding.

3.e. Forest Management

Patzner Field Pool 11

This unit was established in 1996 when volunteer black walnut seedlings appeared after combining activities were completed in a five acre cooperative farming field. In 1998 additional trees were planted along the northern third of the field. The planting consisted of 100 swamp white oak and 25 butternut bare root stock seedlings.

During August, 2004 the area containing the 1998 plantings was mowed and all the remaining trees were wrapped with 2' plastic trunk wraps. Of the 125 trees originally planted 57 remain today. The stand of black walnut has grown to 345 trees with many of the largest trees being ~ 27 ft. tall, and 6 in. DBH.

Dago Slough Pool 11

This 23 acre unit was established in 2002 when 406 swamp white oak RPM trees were planted in 11 old abandoned cooperative farming fields in the Dago Slough bottoms. The area is located within the north portion of the McCartney Bay Closed Area. Planting and tree maintenance has been conducted as part of a cooperative venture with the Cassville School District called the "Legacy Project".

During 2003 a total of 150 swamp white oak, 150 black walnut, and 180 cottonwood saplings were planted in the fields.

During August of 2004 the eleven fields were mowed to eliminate competing vegetation. Legacy Project activities during 2004 included students hand pulling competing vegetation from around each tree, in addition to assessing tree survival, and removing dead or dying stock. Other activities included placing 2' plastic wraps around each planting

to prevent rodent damage.

Of the 406 RPM trees originally planted, 286 survive today (70%). Bare root stock planting success was only 17 of the original 150 walnut, and 150 swamp white oak (.05%). All 180 cottonwood plantings failed.

Inspection of Pool 11 Plantings

All six of the 2003 sites were visited during the summer of 2004. Of the original 212 swamp white oak and black walnut bare root stock plantings only two surviving trees were found.

See also section 2.d. Environmental Management Program.

3.g. Pest Plant Control

The pesticide use report was completed for the District. Small amounts of glyphosate were used for Refuge kiosk pads. Glyphosate, Triclopyr, Nicosulfuron, Primisulfuron, and Dicamba were used by cooperative farmers in the Turkey River bottoms. Glyphosate was applied at the Dickeyville radio tower site in preparation for a native grass seeding.

3.h. Other Habitat Management

The 4.2 acre Dickeyville radio tower site (section 36 T2,R2 Grant County) was seeded with native grasses. The Refuge acquired this site from the Rock Island District, Corps of Engineers during 2000. The Corps acquired the site in 1964 and constructed a 300 foot radio communications tower and service building. The Refuge now uses the tower as part of its radio system. The Corps permitted the adjacent farmer to graze cattle on the site since acquisition. Seeding of the land surrounding the tower is the culmination of phase out of grazing and construction of fencing to exclude cattle. The area was treated with glyphosate, then seeded with a grass mix, including little bluestem (201bs pls), sideoats grama (28 lbs pls), rough dropseed (Sporobolus asper/12 lbs pls). We planted no forbs because the pre-existing thistle infestation will probably require repeated herbicide applications until controlled.

The peninsula that juts out into Cold Springs Bay was seeded with 12 lbs pls of western wheatgrass (Agropyron smithii). The boat access along the peninsula was dredged as part of the Cold Springs Landing rehabilitation work done in 2003. The spoil material was spread out on the peninsula and allowed to dry prior to seeding.

5. COORDINATION ACTIVITIES

5.a. Interagency Coordination

The Environmental Management Program remains a high priority activity. We coordinated with Rock Island and St Paul Districts, Corps of Engineers, as well as the Wisconsin, Iowa, and Minnesota State Departments of Natural Resources. No project specific planning meetings occurred this year, but District personnel attended planning group meetings (Fish and Wildlife Work Group, Fish and Wildlife Interagency Group). The primary focus of these groups was development of Environmental Pool Plans.

District personnel also attended meetings regarding the Corps of Engineers (Rock Island District has the lead) Navigation Study throughout the period. The Army's Chief of Engineers issued the Final Upper Mississippi River-Illinois Waterway System Navigation Feasibility Study [Navigation Study] Integrated Feasibility Report and Environmental Impact Statement. The Report describes a framework for ecosystem restoration and navigation improvements on the Upper Mississippi River and Illinois Waterway. The report will go to the Secretary of the Army for review and submission to Congress.

The recommended plan includes a program of incremental implementation and comprehensive adaptive management to achieve the dual purposes of ecosystem restoration and navigation improvements. Its first costs are the \$5.7 billion framework for ecosystem restoration and \$2.6 billion for the navigation efficiency improvements. The details include:

- -- An initial 15-year increment of ecosystem restoration actions with continuous analysis and review to shape the next increment at an estimated cost of \$1.58 billion.
- -- Immediate implementation of non-structural and small-scale structural navigation measures, together with monitoring and reporting of traffic and economic conditions at an estimated cost of \$235 million.
- -- Pre-construction engineering and design of seven new locks, together with further analysis, with initiation of construction subject to congressional review. The estimated cost of the seven new locks is \$1.79 billion.

The Refuge sent comments on the Lansing Bridge Feasibility study. The main concern would be changes to the bridge alignment. The contractor was reminded that any realignment would need extensive review and compatibility determination by the Refuge.

Work was completed by the Corps of Engineers to widen and realign the access road at Lock and Dam 9. During initial planning of this project, a variety of slope and wall designs were considered to eliminate or reduce the amount of wetland fill needed to complete the project. It was determined that the safety of the road alignment would necessitate the fill of .02 acre of Refuge land. The Corps of Engineers was able to complete the realignment under the authority of the original Right of Way Permit, dated February 15, 1939.

The District issued a Special Use Permit to the Burlington Northern Santa Fe railroad for a temporary work pad, access road and bulkhead to facilitate construction of a second bridge and rail set over the Wisconsin River, south of Prairie du Chien. Work on bridge construction commenced and continued through the year. Permit conditions include restoration of pre-existing ground elevation and replacement of all trees removed, plus 30 percent, using root pruned method seedlings grown from locally collected seeds.

5.b. Private Lands Activities

District staff completed two 10 acre prairie plantings this past year. A ten acre planting was completed in late October 2003 on property owned by Bill and Melissa Hendrickson near Gays Mills, Wisconsin (T10N, R4W, Sec 31, Utica Township, Crawford County, Wisconsin). This site lies adjacent to an 8 acre site previously planted in 2003 and an 8 acre remnant tract of hillside prairie/savanna. Approximately six pounds

PLS/acre were planted using a Truax Flex II drill. The seed was purchased from Carl Kurtz, who harvested it from a native prairie near St. Anthony, Iowa. The site was hayed in preparation for planting.

A 10 acre prairie planting was accomplished in early June on property owned by Edric Olsen of McGregor, Iowa (T94N, R3W, NE % NE % Sec 9). The landowner prepared the site for planting by mowing. Approximately 61bs PLS/acre (Kurtz seed mixture) were planted using a Truax Flex II drill. Excellent rainfall occurred during the first half of the summer, followed by a relatively cool and dry August.

Eight acres of native hillside prairie/savanna were enhanced on the Bill and Melissa Hendrickson property in January 2004. This parcel contains several state and federally listed species. Work was completed by the Driftless Land Stewardship, LLC. Treatment included invasive species removal and tree and shrub removal. A fire break was constructed around the tract to facilitate future burns.



Hendrickson hill prairie in Wisconsin.

The Iowa Private Lands Office provided funding to help initiate a 71.5 acre prairie/savanna restoration on a tract of land owned by Mary Jane Hatfield near Kendallville, Iowa (T100N, R10W, Sec 35, Fremont Township, Winneshiek County, Iowa). This restoration project is an outstanding private landowner initiative and includes one of the best prairie restorations in the state of Iowa. Funding was used to open the enclosed forest canopy on this property, to establish a fire break, and to control invasive species within both the prairie and savanna restoration sites. The area was successfully burned during the fall of 2004.



MJ Hatfield prairie restoration in Iowa.

Funding was secured through the (FWS) Wisconsin Private Lands Office to assist the Melli-Bixby Grant County Land Trust with a savanna restoration project on a 55 acre tract of land known as the Cemetery Unit(T5N, R6W, NW ¼, SW ¼, Sec 6, Wyalusing Township, Grant County, WI). At the time of European settlement the ridge-top portion of this unit was likely savanna or brush prairie, with woodland and mesophytic species occupying the ravines. The area had been degraded, primarily through succession, but also by grazing and the influx of invasive species. Though much of the unit retains savanna indicator species and open grown oak trees, fire intolerant species are rapidly out-competing shade intolerant species. Garlic mustard is scattered throughout the unit. Funding was supplied to begin herbicide and mechanical control of the invasive species and to thin the encroaching trees and shrubs in preparation of the introduction of prescribed fire.

Platte River Partnership - The McGregor District was approached by SW Badger RC&D Director Steve Bertjens and asked to help identify potential wetland restoration projects along the Platte River. An exploratory meeting was held in Lancaster, Wisconsin with members of the Grant County NRCS and SWCD offices, Wisconsin State Private Lands Coordintor Jim Ruwaldt, ROS Tim Loose, and the local chapters of Ducks Unlimited and Pheasants Forever. A decision was made to arrange an aerial survey of the area in late spring. An aerial survey was completed in May 2004 using the Region 3 aircraft. During the flight Tim Loose and Jim Ruwaldt identified 11 potential restoration sites.

Owners of the potential sites were contacted by the local NRCS office and permission was granted to visit approximately half of the sites. Of the sites visited, two have been identified as potential projects. The NRCS has taken the lead on surveying these sites, with estimated completion dates in late winter 2005.

6. RESOURCE PROTECTION

6.a. Law Enforcement

District law enforcement personnel remain the same as last year with Full Time Refuge Officer Nick Stavroplus and Assistant District Manager/Collateral Duty Officer Clyde Male. Together, both officers issued a total of 44 violation notices involving 42 individual violators. Both officers maintained a 100% conviction rate with all violation notices issued.

Violation Notices issued during FY2004 are as follows:

- 4 for "Violation of refuge special regulations: Operation of ATV across refuge lands."
- 4 for "Violation of Refuge Special Regulations: Possess or Use of Alcoholic Beverage by Person under 21 Years of Age."
- 2 for "Violation of Refuge Special Regulation Left property unattended at site on the NWR for over 24 hours."
- 2 for "Violation of Refuge Special Regulations: Carrying, possessing, discharging firearms on a NWR."
- 3 for "Violation of Refuge Special Regulations: possession and use of alcohol while hunting."
- 3 for "Parking Violations"
- 1 for "Removal of property (2 NWR SIGNS) from a NWR."
- 1 for "Operating a vehicle (snowmobile) carelessly and in a willful manner or with wanton disregard for the rights or safety of others."
- 1 for "Permitting an unconfined domestic animal to enter or roam at large upon a NWR."
- 2 for Operating a boat while under the influence of intoxicating
- beverages or controlled substance."
- 1 for "Permitting another person to operate a boat (PWC) in a reckless or negligent manner."
- 1 for "Destroying, disturbing, collecting, a plant or animal on a NWR."
- 1 for "Use of fireworks on a NWR."
- 1 for "Littering on a NWR."
- 2 for "taking a migratory bird while in possession of shot shells loaded with toxic shot (lead)."
- 1 for "Attempting to take waterfowl after legal shooting hours."
- 2 for "Taking waterfowl in excess of daily bag limit."
- 2 for "Hunting migratory waterfowl with an unsigned federal duck stamp."
- 1 for Taking, possessing, transporting, shipping, or exporting migratory birds or their parts, eggs, or nests in violation of any state law. - No State Hunting License in Possession."
- 2 for "Violation of U.S. Coast Guard Regulations Personal Flotation Devices."
- 4 for "Violation of U.S. Coast Guard Regulations No Running lights."
- 1 for "Operating a boat on a NWR in violation of State Law Speed & Distance."
- 1 for "Fishing on a NWR in Violation of State Law No Fishing License."

• 1 for "Hunting on a NWR in Violation of State Law - No Exterior Goose Permit."

Wildland Fire Investigation

On March 21, 2004, at approximately 1330hrs, ADM Clyde Male reported seeing a wildfire burning in the Turkey River Bottoms (pool 11), within the refuge boundary, Clayton County, Iowa. Male was on the northeast side of the Mississippi River opposite to the fire that was burning on the southwest side of the river.

At approximately 1505hrs RO Nick Stavroplus arrived at the fire scene for size up. Fire had burned approximately 12 acres with fire still burning on the north side of the access road under hard wood tree stands, in mostly leaf litter, with occasional brush. The fire's head was traveling NE with winds estimated at 3-10mph from the SW. Head flame lengths varied from 6" to 4'. Natural and manmade barriers which surrounded the entire fire included the access road, Turkey River and Mississippi River. With the existing fire barriers in place and elevating evening humidity levels it was decided to allow the fire to burn out naturally without any initial attack operations. RO Stavroplus monitored the fire into the evening until fire activity had decreased to a minimum at approximately 2000hrs.

On March 22, 2004, at approximately 0900hrs RO Nick Stavroplus returned to the fire scene and declared the fire as out. Total acres determined as burned were 30.

RO Stavroplus determined the fire's origin to be a campfire that was located on the south point of the burned area. No suspects have been identified at this time.

Wisconsin DNR Conservation Warden Dennis Kirschbaum retired during July, 2004. Denny had been the Prairie du Chien area warden for nearly twenty years. He was among the best of wardens; balancing ambitious enforcement with active public relations and education. Denny began his career in conservation as a summer employee on Upper Miss Refuge, Cassville District.

Grand Excursion 2004

The Grand Excursion 2004 was a celebration of the Sesquicentennial of the original Grand Excursion of 1854 which celebrated America's first railroad connection to the Mississippi River. The capstone of this modern day celebration was the Grand Flotilla which was comprised of 7-10 paddle wheel boats. It began June 25, 2004 in the Quad Cities of Iowa and Illinois and ended in the Twin Cities of Minneapolis and Saint Paul during the $4^{\rm th}$ of July Weekend. The Flotilla was complimented by on-shore festivals, programs, bike tours and educational events in more than 50 ports of call.

The flotilla passed through the entire length of the UMRNW&FR. Hundreds of recreational boaters followed all or some of the Grand Excursion. Refuge Officers from Upper Miss and other refuges were on the river to meet and greet visitors, explain the refuge, and help people enjoy a safe visit. From June 29, 2004 through June 30, 2004 the flotilla passed through the McGregor District. During this time 4 violation notices were issued.

On July 3, 2004 District Refuge Officers Clyde Male and Nick Stavroplus



Two of the paddle wheelers passing through the Refuge in July.

assisted Savanna District Refuge Officer Darren Witt as well as the U.S. Secret Service in providing security during presidential candidate John Kerry's visit to the Dubuque, Iowa Riverfront 4th of July celebration. Candidate Kerry took a boat ride on the Mississippi River to watch the city's fireworks display. Male and Stavroplus each piloted refuge vessels boarding two Secret Service Officers to provide immediate protection to the vessel transporting Kerry.

Refuge Officer's Male & Stavroplus spent a considerable amount of time planning the Refuge's first Sobriety Safety Checkpoint. Specifics of the operation were coordinated with the U.S. Attorney's Office in Cedar Rapids, Iowa. On July 17, 2004 the Sobriety-Safety Checkpoint was set up within a refuge side channel known as Ackerman's Cut near Guttenburg, IA (pool 11). This operation was a cooperative venture between Refuge Officers from all 4 Refuge districts, Iowa DNR Game Wardens, and the Iowa State Patrol.

During this operation 44 vessels were stopped and contacted. 58% of the occupants of the vessels contacted were anglers; 42% were cruising or bound for some type of beach activity. 63% of the operators of non-angler vessels stated that they had consumed an alcoholic beverage within 5 hours prior to the checkpoint contact. 15% of the fishing vessel operators had stated that they had consumed some type of alcoholic beverage within the same time frame. 11% of all vessel operators encountered during this operation were legally impaired.



Law enforcement officers combine efforts for the first ever boating Safety Sobriety Checkpoint on the Refuge.

In August both District Refuge Officers Nick Stavroplus and Clyde Male attended training administered by the Wisconsin DNR for "Sound Enforcement" after which both officers were certified. This new enforcement skill will be utilized on the river enforcing excessive motor noise level violations of watercraft.

On October 16, 2004, UMRNWFR Refuge Officers worked a special operation with Iowa DNR Wardens Stan Blair and Brian Smith. Approximately one week prior to this operation, IA DNR officers received a tip that a known group of waterfowl hunters had hunted the "Kohler Slough" area near Guttenburg, IA, within the NWR boundary. The tip advised that the persons in the suspect party were observed over bagging birds and not collecting birds that they had shot.

The morning of October 16th the above officers set up in Kohler Slough to watch for and later observe the suspect group of six hunters. Multiple waterfowl violations were observed and all six subjects committed at least one violation. A total number of eight violations issued to the group included: 4 Wanton Waste, 2 Over bag, 1 Unlawful method of take, 1 PFD violation. Six of the eight violations were initiated from observations made by Refuge Officer's Male and Stavroplus. All of the charges were filed through the state by the DNR officers. All violators where found guilty of all charges. Total collective fines equaled \$600.82. One of the violators who personally received 3 violations lost hunting privileges for one year.

On November 18th RO Male investigated an incident where a reported duck hunter discharged a weapon in the direction of a trapper in the same marsh, striking the trapper. After three days of interviewing individuals that were present in the area that day, as well as the suspected shooter and trapper, no real intentional shooting took place. The trapper, when actually pushed about the incident, revealed that it

was his wife that was shot at and that the shotgun pellets never really struck her, but did fall around her. Upon further examination the wife, who was not familiar with hunting practices, indicated she heard the pellets fall from the sky around her. In the end no action was taken against any of the parties except advising them that the real truth might have saved the refuge investigating officer a lot of time.

6.b. Permits and Economic Use Management

A Special Use Permit was issued to Jack Libbey for Mississippi Explorer Cruises for sightseeing, bird watching, and educational tours in pool 9 and 10. Libbey reported conducting 80 trips (tours) during 2004, transporting 1550 clients. During 2003, he reported 29 trips, serving 453 clients.

Special Use Permits were issued to Tony Toye, Danny Dattilo, Todd Lensing for waterfowl guiding services, primarily in pool 9. Toye is the busiest waterfowl guide permitted on the District. His 2004 report was not received in time for this report. During the 2003 fall season, he reported 210 clients. They killed 804 ducks, including 539 puddle ducks and 265 divers. Mallards (266) comprised the greatest single species taken. Lensing provided guide services for 42 waterfowl hunters on the Refuge. They killed 42 ducks; 22 of these were mallards. Both Toye and Lensing guide primarily in the Ferryville area, pool 9. Guide Dattilo had not reported to date.

A Special Use Permit was issued to Burlington Northern Sante Fe railway for construction of a temporary work pad for installation of a rail line and bridge over the Wisconsin river.

Special Use Permits were issued to William Hubbard Jr. and Mark Clements for operation of fishing floats in Pools 9 and 10. The permit to operator Bill Hubbard, Jr. was suspended during a portion of the year because they did not have a US Coast Guard licensed vessel operator available to transport clients.

6.g. Land Acquisition Support

The District requested that Realty pursue acquisition of the 73.8 acre Capitol Indemnity tract near the north side of Prairie du Chien, Wisconsin, including Pig Slough. Realty Specialist Lois Lawson contacted representatives of Capital to pursue government purchase. However, Capital subsequently decided to offer the area for sale on the open market. The area was sold to a private party.

As part of a search for a new District headquarters site, DM Lindell requested that Realty pursue purchase of a 108 acre parcel currently owned by Tom Ballard. The parcel includes bluff lands (section 11, T94,R3), south of Pike's Peak State Park (IA), overlooking the Refuge above Johnson Slough. Realty Specialist Lawson initiated an appraisal resulting in a government offer to purchase for \$358,000. Later conversations with Mr. Ballard indicated he was considering the government's offer, but wished to offer the parcel for sale on the open market. He said he would ask \$600,000.

7. PUBLIC EDUCATION AND RECREATION

7.a. Provide Visitor Services

New kiosks were installed at the Village Creek (Pool 9), Dairyland Power (Pool 9), Harpers Ferry (Pool 10), Nobles Island (Pool 10), Bussey Lake (Pool 10), and Grant River Recreation Area (Pool 11) boat landings. Kiosks were replaced at the Visgers (Pool 9), New Albin Army Road (Pool 9), Bad Axe (Pool 9), Winneshiek (Pool 9), Sny Magill (Pool 10), and Bagley Bottoms (Pool 10) boat landings.

Community leaders involved with riverfront development planning in Guttenberg approached the District about creating a hiking trail on the south side of town. After discussions with District staff, the development committee agreed that a low impact trail adjacent to the DNR boat landing would serve the needs of the community and the Refuge, while minimizing disturbance to the Refuge. A proposed trail route was marked with flagging and a rough topographic survey was completed in early fall. The trail lies approximately 3 foot above normal pool elevation and will be susceptible to periodic flooding. Refuge staff worked with community volunteers to clear the trail and put up standard hiking trail symbols. The city and the District will evaluate use over the next year. If substantial numbers of people are using the trail, we will consider installing a kiosk at the trail head and placing flood tolerant benches along the trail.

An accessible porta-potty was placed at Cold Springs boat landing under a cooperative arrangement with the Falling Rock Walleye Club. The club has agreed to pay for all pumping and cleaning of the facility, while the Refuge assesses the costs and value to the public. The club installed a collection port for voluntary contributions to supplement the maintenance of the porta-potty. The majority of the anglers using the Cold Springs Bay for fishing are members of the Walleye Club and have been asking the Refuge to put some type of toilet facility there for several years.

A similar porta-potty was installed at the Bagley Bottoms Landing, Pool 10. Staff tore down the old bathrooms and built a 10×10 pad to accommodate the new porta-potty. At this time the District is responsible for the costs to maintain this facility.



Porta-potty installed at Cold Springs landing, Pool 10.

7.b. Outreach

See also section 3.e. Forest Management

District staff were on hand to answer questions during the Grand Excursion Celebration in Prairie du Chien. A display was set up in coordination with the Iowa and Wisconsin DNRs, Army Corps of Engineers, and the Friends of the Upper Mississippi River Refuges. Despite our prime location, right across from the loading dock where the steamboats were scheduled to stop, only a handful of people stopped by to talk or ask for information. The majority of the visitors were content with sitting along the shoreline and watching the boats pass by. While staff were sitting in Prairie du Chien, the McGregor Visitor Contact Station received an unexpected barrage of visitors from the Delta Queen Steamboat, which unexpectedly docked across the street from the office.

ROS Male hosted a TV crew from Channel 9 News, Cedar Rapids, Iowa on June 3rd. The crew interviewed Male and shot footage of the Refuge and it's importance to the Midwest. The 15 minute segment, which included over four hours of filming, appeared within a one hour special on the Grand Excursion and the Mississippi River resources.

The Fourth Annual Upper Mississippi River Festival was held Tuesday and Wednesday, May 11-12, 2004 on the grounds of the historic Villa Louis in Prairie du Chien, Wisconsin. This event is co-sponsored by the Friends of the Upper Mississippi River Refuges and the Natural Resource Agencies in Northeast Iowa and Southwest Wisconsin.

2004 marked the 150th anniversary of the Grand Excursion. This year's festival focused on the changes brought about by this historic event and the influences on the river's resources. The overall theme of the Festival was "Celebrating a River of Life." This year's station themes were River Navigation . . . the Good, the Bad, the Balance, Clam Camps

and the American Pearl Industry, The Great Fur Trade . . . the Exploration of a Nation, and Lessons in Conservation.

The presentations emphasized hands on experiences. Students in grades 7-9 had an opportunity to explore and investigate many issues, draw conclusions from their findings and consider how their actions or personal choices affect the environment. 850 students and teachers attended from 5 counties and 12 school districts.

ROS Male conducted a birding tour for individuals attending the MidWest Watchable Wildlife Conference in Dubuque, Iowa. The tour took place on October 7th at the Refuge's John Deere Marsh area. Only twelve participants showed up for the trip which started 6:00 am on the day after the conference's big late night party.



Upper Miss River Fest: above - students learn about river mussels and below - they attend the Lessons in Conservation session to learn about changes in farming practices.





ROS Henry explains eagle nest activity to students during one of the River Fest tours.

8. PLANNING AND ADMINISTRATION

8.a. Comprehensive Conservation Planning

The Comprehensive Conservation Planning that began during 2002 continued this year. Between January and April 2004, Refuge staff conducted briefings for the Illinois, Iowa, Minnesota and Wisconsin Departments of Natural Resources. Rock Island and St. Paul District, Corps of Engineers staff were also provided briefings. During January, 2004, three briefings were conducted for Federal and State legislators and staff.

Writing of the Plan, including alternatives and Environmental Impact Statement began during this year.

8.b. General Administration

Office computers were upgraded to a network system with a high speed internet connection.

\$36,607 were sent to local government units under the Refuge Revenue Sharing Act.

8.c. Safety

Monthly safety meetings were held on topics such as the 911 system, using fire extinguishers, cold water near drowning, and poisonous and toxic animals and plants.

Several days of heavy rain contributed to a mud slide at the McGregor District office on May 22. Debris and mud clogged the catchment basins and drainage culverts behind the office on the bluff. Therefore, large

amounts of mud and debris washed onto the office and warehouse buildings and surrounding premises. The road in front of the office was closed on Sunday, May 23 because of mud from several slides on the bluff. It caused damage to the facade wall in front of the office trailer and packed mud over two feet thick under the trailer. Clean-up involved all staff for more than a week. The event washed mud and debris down the bluff side, filling the catchment basins above the office. These are a continuing safety concern, as it is not possible to get required equipment in to clean out the basin and culverts, unless an access road is constructed along the side of the bluff. The next high rainfall event may result in more damage because the water control facilities above the office are partially filled with mud and debris. Winona headquarters and the regional safety office were notified about the issue.



Mud cleanup behind the office building and office trailer.



Mud and debris from storms at the warehouse at the McGregor District office site.

The Regional Office Safety Officer Patrick McDermott and staff conducted a station safety inspection and Environmental Compliance Audit on May 17, 2004. Safety office staff included John Hoffman and Craig Nibbe. They conducted a safety program review with District staff and toured District facilities. They noted several action items needing attention. All action items were satisfactorily addressed by mid August, 2004. The station safety files contain details of action items and remediation.

There were several safety issues noted by the inspection team regarding the surplus mobile home we have converted to office space. We do not believe some of these items can be resolved without affecting other issues at our current headquarters site. Following are the items noted and our response:

- 1. Trailer exit doors area restricted and are not capable of swinging to full required width of the opening in which they are installed.
- 2. Trailer & Administrative Building exit routes do not discharge to open areas.
- 3. Headroom for means of egress in trailer is less than required 7'6".

These conditions are not resolvable without adversely affecting other safety issues and functionality of the existing headquarters site.

All of the above conditions are symptoms of inadequate station facilities and location. In plain language, it is unlikely we can modify the existing site to conduct safe, viable operations. This site and facilities are well beyond the site capability threshold. The existing primary administrative building was designed to accommodate one manager and one administrative technician. Current permanent full time staff is eight. Additional temporary employees/volunteers vary throughout the year from one to four. Without the space provided by the existing (administrative) trailer, we could not provide working space

for staff. Even if the existing primary administrative building was enlarged, the site does not provide sufficient space to conduct operations, and accommodate government vehicles and equipment. As it is, employees must rely on the good graces of a neighboring land owner to park their vehicles off site, so as to safely accommodate visitors, station operations, equipment maintenance and storage, and limited maneuvering room for all of the above.

ADM Male taught one airboat class for students within the Region on June 23.

8.d. Maintenance

Clyde Male, Tim Loose, and Cathy Henry attended training for the new Service Asset Maintenance Management System (SAMMS). This new system will be required in the future to track all maintenance on facilities and equipment.

Replacement of the headquarters shop roof was completed via a contract with CB Construction (Curt Bucknel), Monona, Iowa. The existing flat roof was replaced with a gambrel style roof. The new roof design added much needed storage space; effectively a second story for the shop, and eliminated the constant struggle with leaking flat roof.

Jim Brown, Tim Loose and Colm Young completed renovation of the New Albin restroom facility. Repairs included replacement of the existing urinal, toilets and shingles and the installation of two skylights.

Refuge staff spent several days digging out the debris filled tunnel accessing the Bertom Lake Landing. Local flooding that saw more then 6" of rain in one night completely blocked the creek/tunnel access point. During September this same project was completed when staff dug out the creek channel adjacent to the tunnel to allow free flow down the creek with future events.

8.e. Volunteers

184 volunteers donated 1545 hours of service to the District in 2004. Volunteers assisted staff by keeping trash and debris picked up at boat landings, hiking trails and islands/beaches.

District staff assisted Living Lands and Waters with several large cleanup days in Lansing, Prairie du Chien and Cassville as their barges and equipment passed through in mid-July. Several tons of garbage were collected at each site.



Livings Lands and Waters river cleanup crew.

8.f. Personnel

McGregor District staff remained the same in 2004 with the exception of two temporary "flood funds" employees who completed their appointments. Peter Ziegler and Colm Young contributed valuable work to the District during their appointments.

District Manager
Assistant District Manager
Refuge Operations Specialist
Refuge Operations Specialist, Driftless Area NWR
Biological Technician
Administrative Technician
Maintenance worker

John Lindell
Clyde Male
Tim Loose
Cathy Henry
Neil Henkenius
Dixie Palmer
Jim Brown



Left to right Back row: Dixie Palmer, Tim Loose, Neil Henkenius, Nick Stavropolus, Clyde Male. Front row: Cathy Henry, Jim Brown, John Lindell.

9. WILDLIFE

9.a. Endangered/Threatened Species

Refuge staff observed record numbers of migrating bald eagles during the last week of April. Over 2,000 eagles were counted within a 3 mile stretch of water just north of Prairie du Chien, WI. One kettle of 700 eagles was observed along the bluffs just north of Effigy Mounds National Monument.

Fourteen injured or dead bald eagles were salvaged by the District during FY2004. Most were brought in from DNR wardens. Although injured eagles were sent to the Raptor Center in the Twin Cities, none were rehabilitated. One eagle was determined to have been shot. Refuge officer Stavropolus investigated the case, but no leads were available. The dead eagles were sent to the Eagle repository in Colorado. Three of these died from vehicle strikes and the remainder were from unknown causes.

9.b. Waterfowl

There were twelve Trumpeter swan cygnets hatched on the District this year. The Guttenberg Moist Soil unit pair produced six, the Potosi (WI) pair hatched two, and the Bagley Bottom pair (WI) hatched four. The Bagley pair, as in the past, laid several infertile eggs. Dave Hoffman,

a Biologist with the Iowa DNR, and Biological Technician Neil Henkenius, replaced the seven eggs with six viable eggs that were from an abandoned nest. This is the Bagley pair's third nesting attempt and it is thought that there might be some infertility problems with the female swan.



DNR biologists replace eggs at a Trumpeter swan nest.

The District's first waterfowl migrants of the year showed up on February 18th with the arrival of golden-eyes in Pool 11. By the 26th migrating mallards and geese were common place on the District. Tundra swan fall populations peaked on November 13th; overall 263,303 swan use days were recorded. Canvasback duck use days (DUD) within the District reached 4,655,306 and the peak population was noted November 25th. Other notable species DUD included scaup at 2,187,521 and mallards at 263,303.

The open water area of lower Pool 11 from Potosi, WI to Sunfish Lake has historically been used by diving ducks. However, when the fingernail clam populations in the area died off during the 1980s so did the diver duck use. Notable diving duck populations were once again observed in the area this fall. Canvasback duck use days totaled 184,930 for the area, with scaup use days at 390,812. Both species' use peaked during the first week of November in the area.

9.f. Other Migratory Birds

Red-winged blackbirds were first observed on territories within the District on February $26^{\rm th}$.

11. CLIMATIC CONDITIONS

The winter of 2003-2004 was again mild. Heavy rains in late May caused record flooding of the Turkey River and flooding of nearly every watercourse in northeast Iowa and adjacent counties in Wisconsin. The summer was unusually cool as can be seen from July and August average temperatures in the table below.

Temperatures and precipitation in Guttenberg and Dubuque, Iowa. (NA means data was not available).

Month/Year	Guttenberg			Dubuque		
	Mean temp	Total precip	Snowfall	Mean temp	Total precip	Snowfall
Oct 2003	52.5	1.5	0	50	1.33	NA
Nov 2003	37.4	5.99	0	37	5.86	NA
Dec 2003	29.2	1.29	5	28	1.81	NA
Jan 2004	17.4	0.6	5.5	17	0.39	NA
Feb 2004	24.9	1.55	14.5	23	1.27	NA
March 2004	40.7	4.21	0.3	39	4.07	NA
April 2004	52.4	1.1		50	1.28	
May 2004	61.8	11.16		60	7.27	
June 2004	69	3.98		66_	3.31	
July 2004	72.3	5.3		70	1.49	
August				65	3.14	
2004	68.5	3.25				
Sept 2004	67.9	0.21		65	0.64	