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## MIDWEST PEREGRINE FALCON RESTORATION, 1995 REPORT

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NOTICE: All peregrines banded in the U.S. Midwest in 1995 got a bicolored band, black over red, on the left leg. Wild-produced birds got a purple anodized USFWS band on the right leg; hacked birds have a gold anodized USFWS band on the right leg.

As in the past, some of the black/red bands have the lower (red) character on its side; these we show by using a star (\*) to indicate the tipped-over letter or number, for example, 2/\*E or H/\*4. It is essential to include the star because both combinations are in use (H/4 and H/\*4, for example). It is also important to put bands on right side up, to make it easier to read them in the field (even the USFWS bands get read in the field on occasion).

### INTRODUCTION

After several years of rapid growth, Peregrine Falcon (*Falco peregrinus*) populations in the Midwest started to level off in 1995. Annual increase from 1990 through 1994 averaged nine territorial pairs (28%). By contrast, from 1994 to 1995, territorial pairs increased by only five, from 62 to 67 (8%).

Ted Armstrong, Ontario Ministry of Natural Resources, reports that 15 pairs of peregrines were on territories in the province this year, eight of these on or near the north shore of Lake Superior.

At least 118 young were fledged this year in the wild (two Ontario eyries that produced four young in 1994 were not checked in 1995 early enough to count young); 103 were banded and 15 were not because of remote locations or other logistical problems. An additional 29 captive-produced peregrines were hacked in our area, five in Michigan, 11 in Kentucky, and 13 on the Sibley Peninsula, Lake Superior North Shore, Ontario.

The weather in February and March 1995 was generally mild in the Midwest; egg-laying started early. April was cold and wet, but this seemed to have little effect on the incubating falcons. Two periods of very hot weather in early summer were a threat to nests in exposed locations. Brood size at fledging was 2.7 young per successful pair, 1.8 young per territorial pair, about the same as for the past three years.

Production of wild-produced young in 1995 by state or province was (sequence here and in the main list below is north tier of states first, west to east; second tier, etc., then Canadian provinces):

--Minnesota.....	41	young
--Wisconsin	14	"
--Michigan	4	"
--Iowa	6	"
--Illinois	8	"
--Indiana	8	"
--Ohio	16	"
--Kansas	3	"
--Missouri	3	"
--Kentucky	1	"
--Manitoba	6	"
--Ontario	8	"

Total, 118 young

A major disappointment in Minnesota was our failure to locate any breeding pairs on the Iron Range. It is hard to believe that the two pairs that we know nested there successfully in past years would vanish over winter, but no nesting peregrines were found this year by local observers or by Dave Evans on a helicopter survey of most of the mine pits in July.

It was also disappointing to see only one successful peregrine nesting in the Upper Peninsula of Michigan, where three sites have produced young in recent years. The one successful nesting was on Grand Island, discovered in early August by Joe and Barb Rogers (pair 19). At the Porcupine Mountains, a pair lost two clutches to hot weather (pair 47). The Iron Range and U.P. peregrines are, of course, cliff nesters, making their failure all the more painful.

Some highlights of the 1995 season:

--Sixteen peregrines were fledged from wild nests in Ohio in 1995, this in a state with no record of peregrine nesting in pre-DDT days.

--In Columbus, Ohio, five young were banded and fledged, only the second brood of five in our area (pair 32). Egore, mother in 1994 of the first brood of five young, at Cline Avenue, East Chicago, Indiana, fledged only two young this year, but this still totals 15 young for her in four years. Wayne Nelson, who has studied peregrines in the Canadian Queen Charlotte Islands for many years, has suggested that females with high productivity in a given year may suffer increased risk of mortality before the next breeding season. Possibly high production may also be associated with lowered productivity the following year, on the presumption that raising a big brood places a significantly higher energetic burden on the parents and leaves them less fit going into the winter.

--For five years a male wearing a green band and a breeder's band has nested near Kennedy Creek on the Minnesota North Shore. His identity was revealed when he was struck by a car about a mile from the 1995 nest site in mid-July, 1995. He turns out to be Oly, a nine-year-old released 25 miles up the lakeshore at Mt. Leveaux in 1986 (pair 11). Until his unfortunate end, he shared with Jingles, the male at 125 S. Wacker, Chicago, Illinois, and male Dave red 6P3, at the Blatnik Bridge, Duluth, Minnesota, the distinction of being the oldest known male peregrine in our area.

--The oldest female, so far as we know, is ten-year-old Harriet, Jingles' mate. Two females in Minnesota are nine years old.

--The productive career of MF-1 (Muffin) finally ended at age nine when she was killed by a female peregrine who took over her territory at the Multifoods Tower, Minneapolis, Minnesota, on March 24, 1995 (pair 2).

--Calvin found a mate! Owner of the State Capitol dome in Madison, Wisconsin, Calvin has returned late in spring in previous years, leading to fruitless attempts to recruit females headed for more northern destinations. This year, although still arriving on April 16, after nesting had started by other Wisconsin pairs, Calvin attracted a female, three-year-old Anita 74R, in May. They reared a late brood of three young (pair 18).

--At an abandoned railroad bridge across the Ohio River between Louisville, Kentucky, and Jeffersonville, Indiana, a young unbanded peregrine just out of the nest was captured on the Indiana shore in July, proof that the adults on the bridge had not failed in their nesting attempt, as had been suspected (pair 37). The youngster was banded and then hacked with 10 other peregrines at Burgin, Kentucky. This is the first peregrine nesting in Kentucky since the late 1930s (the Indiana/Kentucky boundary runs along the north bank of the Ohio River).

## **1995 POPULATION STATUS**

### **SUCCESSFUL BREEDING PAIR**

(Pairs fledging young)

1. Mayo Clinic, Rochester, Olmsted County, Minnesota. Ted Bartel, Mayo staff, reports that male Chase 06T and female Minnsoar (Aerial) 75V nested for the fourth year. A different female was present for a while in late winter. Four eggs were laid by April 1. Two young hatched by May 5 and fledged in mid-June, a male and a female. This year, sound was added to the excellent closed circuit TV nest coverage shown in the busy main Mayo concourse.

2. Multifoods Tower, Minneapolis, Hennepin County, Minnesota. MF-1 (Muffin) was at the nest box with Will 04Y on February 24, ready for what would have been her ninth nesting attempt. On March 24, she was seen by a window-washing crew striking a second floor window on the nearby Dain Bosworth Tower, leaving a bloody imprint before falling to the ground. She took off, hit a sign and faltered but finally made it aloft. The next morning, she was found dead in the nest box, having somehow gained 480 feet of altitude despite mortal wounds. MF-1 clearly had been killed by another peregrine. She died from puncture wounds in her lungs. Flesh had been removed post-mortem from her neck and shoulders. Female Marla 81V, the presumed killer, had possession of the nest box by March 27 and remained for the nesting season. A year earlier, Marla 81V had also been seen twice at the Multifoods box, but left to nest that year at her original nest site on the Colonnade building, four miles to the west.

Five-year-old Marla, now nesting for the fourth time, and Will, now eight years old and nesting for his seventh season, produced four eggs by April 15, hatched and fledged four young, three males and a female, in late June.

Marla abandoned her former territory and mate at the Colonnade, despite fledging 11 young in three successful nestings there. She was seen making a nest scrape in the Multifoods box on August 25. She and Will spent much of September and October visiting the University of Minnesota Medical School's Mayo Building, two miles east of the Multifoods Tower.

3. Colonnade Building, Hwy. 100 and I-394, Minneapolis, Hennepin County, Minnesota. The vacancy left here by Marla's departure for the Multifoods Tower was filled within a day or two by Rusty, a distinctively reddish unbanded adult female who had spent the summer of 1994 paired with Will at the Minneapolis City Hall, after MF-1's initial disappearance in 1994.

Rusty paired with resident male 31T, newly christened Kato, now six years old. They produced four eggs, all hatched by May 19, and all young fledged in early July, two males, two females. One of the males was killed in downtown Minneapolis on August 22, when it struck a building and then was run over by a car. At least two of the young were still seen occasionally on the Colonnade nest ledge as late as mid-October, according to Doug Anderson, whose office desk is separated from the nest ledge only by a window.

On October 14 and 18 a new adult female peregrine was with Kato 31T at the Colonnade. On October 19, Tordoff identified her; she is Chip, U/P, fledged wild from the Montgomery Ward tower in 1994. Rusty was not seen, apparently having left the territory.

4. North Central Life Tower, St. Paul, Ramsey County, Minnesota. Meg 12R again overwintered here and nested for the eighth year; her mate was Spanky 04T for the fourth year. Four eggs were laid by April 20; three females and a male hatched by May 22 and fledged around July 3. One young female was killed July 8 by colliding with a skyway window.

5. Montgomery Ward, St. Paul, Ramsey County, Minnesota. Female Comet 11V returned for the sixth year, paired for the second year with Lindee 1/\*A. Three of their four eggs hatched by May 16 and two males and a female fledged in early July. The young female was found with wing injuries in St. Louis, Missouri, on July 29, a remarkable early dispersal. She was recovering at TRC in late August. Noisy demolition of the warehouse adjacent to the nest tower seemed to be ignored by the falcons, but the tower itself will be gone by winter. Our hope is that the birds will move to a nest box already placed by the Raptor Resource Project on a tall apartment building one-half mile to the north.

When peregrines first occupied the Montgomery Ward tower in 1990, plans had already been made for demolition of the tower. It is a tribute to the cooperation of David Lighthall and other Montgomery Ward people that Comet and her mates were able to fledge 20 young from a box built and installed by the building staff, before the tower came down.

6. NSP King Power Plant, Bayport, Washington County, Minnesota. Female Mae 31V, six years old and nesting for the sixth time, again spent the winter here. As in 1994, she paired with an adult male with a black band on his right leg, but not further identified. They produced four eggs by March 30, hatched all four by May 2, and fledged two young of each sex by June 15.

Major antenna installation work on the smokestack began in late winter and continued through the nesting season. Bob Anderson monitored the impact on the peregrines. Mae's belligerence subsided somewhat as the work went on, but she kept the workers on their toes throughout. Work was interrupted to accommodate hatching and fledging. Despite the hassle, the brood of four is the largest fledged by Mae at this site.

7. NSP Blackdog Plant, Eagan, Dakota County, Minnesota. Female, 90R, three years old, nested for the second year. Her mate is probably 55X again, but this was not confirmed. Clutch size is unknown, but two chicks were hatched and fledged. One bolted prematurely before it could be banded on June 16; the other was a male. An adult was seen with an unbanded young several days after the banding.

8. NSP Sherco Plant, Becker, Sherburne County, Minnesota. Dan Orr, NSP biologist, reports that female 36R, back for the fourth year, paired again with male, 79Z, the second year here for this three-year-old. They produced four eggs, hatched three by May 17, and fledged three males around June 28.

9. NSP Monticello Plant, Monticello, Wright County, Minnesota. In 1993, female 31R paired bigamously with the male from NSP Sherco, four miles away, but did not nest. In 1994, she was present but less faithfully than the year before and apparently unpaired. This year, she finally had a mate of her own (b/r band 1/\*\_), laid three eggs, and fledged three young, two females and a male, around June 24, according to Dan Orr and Ralph Scheinost, NSP.

Dan reports that female 31R was found dead, still warm, at the foot of the stack at the NSP Monticello Plant on July 28, 1995, a very windy day, with a Pied-billed Grebe clutched in her talons. Her injuries indicate a collision with some part of the stack.

10. Palisade Head, Lake County, Minnesota North Shore. Dudley Edmondson identified female Fridge 43R, eighth year here, and a new unbanded male. The nest, found by Dudley, was at the southwest end of the palisade, close to the first nest in 1988. In her eight years, Fridge has moved to a new ledge after two years, two years, one, one, and one. No old nest ledge has been reused, once abandoned. Three young were produced in 1995, two females and a male, banded on June 26. The difficult climbs here and at Kennedy Creek (pair 11) and Finn Church cliff (pair 12) were made by Peter Smerud, Joe Walewski, and Lori Walewski, Wolf Ridge Environmental Learning Center, Finland, Minnesota.

11. Kennedy Creek, Lake County, Minnesota. Dudley Edmondson and Rose Welch reported two adult peregrines at Kennedy Creek in April. In May, Edmondson saw a green band on the male's left leg, breeder band on the right leg, the male here for the past four years. He was able to identify the female, Blueberry 20P, same bird as in past years. The birds nested in an old raven nest on a cliff near the site of the 1993 nest. Three young, only about 12 days old--too young to sex reliably--were banded on June 26. Joe Walewski saw three healthy and active chicks here on July 25, ready to fledge.

On July 17, John Ready found the Kennedy Creek adult male dead on Highway 61, Little Marais, Minnesota, about a mile from the nest site. He had been hit by a car. A partly eaten blackbird was a few feet away. His green band showed that he was Oly, hacked at Mt. Leveaux, 25 miles up the North Shore, in 1986. In his six years with Blueberry, Oly sired 11 young.

Peter Harris said that two peregrines were present and very vocal at nearby Wolf Lake, WRELC, for several days in April, but were gone by May 8. These were probably the Kennedy Creek pair, which had nested at Wolf Lake in 1990.

12. Finn Church cliff, 2 miles northeast of Tofte, Cook County, Minnesota. In May, Jimmy Carlson identified Algoma 77V and an unbanded male, probably her mate from 1993 and 1994; they nested here for the third year. The nest was in the same scrape as in 1994. Three young, two females and a male were banded on June 26 and fledged in mid-July. Carlson saw two, possibly three, flying young here in early August.

13. Minnesota Power and Light Boswell Energy Center, Cohasset, Itasca County, Minnesota. Daryl Councilman, MPL, reports that the same pair, female red X/H, hacked at Nipigon, Ontario, in 1991, and male 74X, fledged wild at the Rouchleau Pit, Virginia, Minnesota, 1991, nested for the third year. They lost

their first clutch in April, when local wind chill reached -50 degrees F. The pair renested, producing three female young which Bob Anderson banded on June 28. He estimates hatching to have been around June 4, fledging in mid-July.

14. Firststar Center, Milwaukee, Milwaukee County, Wisconsin. Greg Septon reports that female Sibella 20V, seventh year at this site, and male Bill 74T, fifth year, produced four eggs in late March, hatched three in early May, and fledged two females and a male in mid-June. In seven years, Sibella has produced 23 young (two augmented), six with McArthur 03Y and 17 with Bill 74T.

15. Landmark on the Lake, Milwaukee, Milwaukee County, Wisconsin. The female here, Alice U/K, was unbanded in 1994; Greg Septon caught her in the nest box on June 20, 1995, and banded and bled her along with her chicks. Her mate was again Omni 76T, a five-year-old hatched at Madison, in his second year at this site. Four eggs were laid by April 21, three hatched by May 25. Two males and one female fledged in early July.

16. Froedtert Malt, Milwaukee, Milwaukee County, Wisconsin. The last of several females attracted to this new site by male Leopold C/D in 1994 was an unbanded juvenile female who remained until early June but did not nest, according to Greg Septon and Jim Marks. This year, Leopold's mate was an unbanded adult female, most likely the same bird. They nested late, producing four eggs by April 29. Three hatched around May 31, one died, and a male and a female fledged around July 12.

17. Edgewater Generating Station, Sheboygan, Sheboygan County, Wisconsin. Six-year-old Silverstreak 42V, in her fourth year at this site, had a new mate, Grant B/N, fledged wild at 48 Wall Street, New York City, in 1993. Greg Septon and Jim Marks point out that eight individuals (7%) of the 110 individually identified nesting peregrines in the Midwest since 1986 have come from the East. Also, falcons in the northern states, southern Manitoba, and Ontario ignore the international border in their dispersal. Clearly, the midwestern U.S. peregrines are not a closed population.

The Sheboygan pair produced four eggs, hatched three by June 5, and fledged two females and a male in mid-July, according to Septon and Marks.

18. State Capitol Building, Madison, Dane County, Wisconsin. Tim Ellestad reports that the male Calvin 48T returned on April 16 from wherever he spends the winter (in 1990, he was trapped on Padre Island, Texas on April 14). Calvin's late returns in 1993 and 1994 thwarted his efforts to attract a mate. This year, however, he finally succeeded in attracting a female willing to stay. She is Anita 74R, fledged wild in 1992 at 125 S. Wacker, Chicago. The pair produced three eggs, which hatched around June 12. Three young males fledged around July 22. Calvin and the Ellestads deserve medals; Calvin for perseverance, Tim and sharp-eyed Mary for making long-range peregrine identifications at this difficult site and for helping thousands of passers-by to have a look at the Capitol falcons.

19. Grand Island, north of Munising, Alger County, Michigan. Joe and Barb Rogers spent five days on Grand Island, July 31 through August 4. Peregrines had been seen here from time to time earlier although they might have been visitors from nearby Pictured Rocks. Joe and Barb saw adult peregrines twice, found a probable peregrine nest on a cliff on the east side of the island, and, on Echo Lake, saw a brown young peregrine still not really strong on the wing, confirming nesting and fledging of at least one young. This is a new nesting site.

20. Book Building, Detroit, Wayne County, Michigan. Judith Yerkey, Detroit peregrine coordinator, reports that five-year-old female Judy red AD paired again with four-year-old male Pop, for the fourth year. Again, both adults over-wintered in Detroit. Three eggs were laid the first week of April, two young, a male and a female, hatched May 8 and 9, fledged June 16 and 17, and were last seen August 11.

21. Whittier Apartments, Detroit, Wayne County, Michigan. Sunrise 55R nested unsuccessfully in 1994 at the Detroit Edison Conner Creek Power Plant, 1 3/4 miles east of the Whittier Apartments, with Solo Jr. 92R. This year, she paired with a new unbanded juvenile male, now named HiRise, and nested on an apartment balcony. She laid her first egg by May 8. Clutch size was not determined, but at least two chicks hatched by June 12. At banding, only one female chick survived. It fledged July 22, according to Judy Yerkey. This is a new nest site.

A new male, Speedster A/\*6, fledged wild from the Book Building, Detroit, Michigan, in 1994, appeared at the Whittier Apartments around September 10, 1995.

22. American Republic, Des Moines, Polk County, Iowa. Sara Berg, Iowa DNR, reports that female 13R nested for the fourth year, paired with a male identified as 93T, who was also reported nesting this year (and also 1992, 93, and 94) in St. Louis MO (pair 35). Male 93T, released in Cedar Rapids IA in 1990, was reported at the hack site in Des Moines in 1991, so he has been reported somewhere every year, but this year in two places. The male in Des Moines in 1994 was partly identified as 93\_. All parties are trying to straighten this out.

The Des Moines pair produced four eggs, three of which hatched about May 5. Three young females fledged in mid-June.

23. Firststar Bank, Cedar Rapids, Linn County, Iowa. Female 49R nested for the third year, paired with male 64\_, probably the same male that was here in 1993 and 1994. They produced four eggs, three hatched around May 9, and two males and a female fledged in mid-June, according to Sara Berg.

24. 125 S. Wacker, Chicago, Cook County, Illinois. At ten, Harriet, released in Minneapolis in 1985, is the oldest Midwest peregrine. Her mate, Jingles, released in Chicago in 1986, is one of the two oldest males. This is Harriet's eighth confirmed year nesting at this site and the seventh for Jingles. They produced four eggs in late March, hatched four young by May 2, and fledged three, two males and one female, around June 13, according to Mary Hennen.

25. Hyde Park, Chicago, Cook County, Illinois. Mary Hennen reports the second nesting at this site. The female is 22R, now four years old. The male is Orion 77T, released in Madison, Wisconsin, in 1990. They produced four eggs by March 28, three hatched, and two young, both females, fledged in mid-June. The nest box at this site will be removed because aggressiveness by the peregrines restricts use of building balconies by tenants. Mary Hennen is trying to find a new spot for the box nearby.

26. 5821 Broadway, Irving Park, Chicago, Cook County, Illinois. Mary Hennen reports that female Eleanor 2/8, now two years old, paired for the second year with five-year-old male Franklin 95T. They produced four eggs by April 1, hatched four on May 5, and fledged three young, two females and a male, around June 16.

27. Cline Avenue at Lake Michigan, East Chicago, Lake County, Indiana. John Castrale, Indiana DNR, reports that five-year-old female Egore 57V and three-year-old male Marty 53Z were back, the fourth year at this site for Egore, the second for Marty. The site has been occupied for seven years. Four eggs were laid, incubation started around March 17. Three hatched by May 1, two young survived to fledging in early June, a male and a female. The unhatched egg was retrieved.

28. U.S. Steel, Gary, Lake County, Indiana. The same pair, seven-year-old female Suzy Q 52P and five-year-old male Vulcan 79T, nested again, the sixth year for the locality and for Suzy Q, the third for Vulcan. A new nest box was used this year. They produced four eggs in early April, hatched two by May 11, and fledged a male and a female by June 13, according to John Castrale. Two unhatched eggs were retrieved.

29. Market Tower, Indianapolis, Marion County, Indiana. This is a new nest site. John Castrale reports that two-year-old male Kinney 7/\*3, hacked in Lexington, Kentucky, in 1993, established his territory in downtown Indianapolis in March 1994 and remained through October. He was joined in 1995 by female Scout 28W, hacked at Kenosha, Wisconsin, in 1992. The earliest nesting pair in our area, they produced four eggs by March 17, hatched all four by April 18, and fledged three males and a female May 30. In late July, an anonymous caller reported that the young female was shot "by his friend" (band number read to DNR, location unknown).

30. Commodore Perry Motor Inn, Toledo, Lucas County, Ohio. Peregrines have nested on this vacant building for eight years; female red 3C7 for the entire time, but with three or four different males. David Scott, Ohio Division of Wildlife, reports that the 1995 male is C/U, fledged wild at Firststar Center in Milwaukee, Wisconsin, in 1993. Four young fledged, initially unbanded because access to the building is prohibited, but one was banded when captured on a nearby roof after fledging. Another youngster was found dead, apparently after colliding with a building.

31. Terminal Tower, Cleveland, Cuyahoga County, Ohio. Sara Jean Peters and David Scott, Ohio Division of Wildlife, report that seven-year-old male Szell paired for the third time with three-year-old female Zenith 23W. They produced four eggs by mid-April, all four hatched May 15, and three females fledged around June 28.

32. Rhodes State Office Tower, Columbus, Franklin County, Ohio. David Scott reports that female Aurora red 4RO returned for the third year, paired for the second year with an unbanded male, Bandit. They had five eggs by April 10, hatched them by May 9, and fledged all five young, three males and two females, by June 23, only the second time a brood of five has fledged in the new Midwest population.

Aurora red 4RO was mis-identified in the 1993 and 1994 Midwest peregrine reports and in the listing of Midwest breeders as "red C/3", a bird of Canadian origin that was found dead in Columbus OH but never nested there, according to Sara Jean Peters.

33. Lazarus Building, Dayton, Montgomery County, Ohio. According to David Scott, female Baltimore 7/D, fledged wild in 1993 from the USF&G Building, Baltimore, Maryland, paired again with five-year-old male Mercury 21X. They produced four eggs in late March and early April, hatched all four on May 3, and fledged two males and two females around June 15.

34. Kansas Power and Light, Topeka, Shawnee County, Kansas. Jerry Horak, Kansas Department of Wildlife and Parks, and Joanne Brier report that this pair moved from the abandoned building used for the past two years to a nest box a block away on the KPL building. Four-year-old female 28R paired again with three-year-old male 56Z, producing four eggs; all hatched May 6. One chick, a female, backed too close to the edge of the nest box to defecate and fell to its death on the morning banding was scheduled, in full view on TV to the banding crew assembled in the building lobby. The surviving three, two males and a female, fledged around June 17.

35. Park Plaza, St. Louis, St. Louis County, Missouri. Three-year-old female 2/3 paired again with five-year-old male 93T (also reported in Des Moines, pair 22), producing four eggs, three hatched, one young died, and two were banded May 23, according to Mike Cooke. This territory has been occupied for four years.

36. Interstate Highway 270 Bridge, St. Louis, Missouri. Mike Cooke reports that a pair nested and produced one young in an inaccessible spot on this bridge across the Mississippi River. This is a new site. The adults were not identified nor was the young bird banded.

37. Ohio River Bridge, Louisville, Kentucky. Laura Burford, Kentucky Fish and Wildlife, reports that a pair of banded unidentified peregrines were present and copulating early in the season. Their activity was focussed on the center span of the abandoned railroad bridge. No nest was located and failure was suspected, but on July 18, a newly fledged unbanded female peregrine was captured nearby on the Indiana shore. She was banded and hacked successfully at the Kentucky hack site at Burgin, where she was still present on August 24.

This is a new nesting site, and the first peregrine nest in Kentucky since the late 1930s.

An adult female peregrine hacked by The Peregrine Fund in Virginia in 1988 was found sick near the bridge on June 13; it died at the Louisville Zoo from lead poisoning. Two peregrines have since been seen at the bridge; it is unknown if the dead female was part of the nesting pair.

*Robert Nero and Bob Jones, Manitoba Wildlife Branch, supplied the following information on Manitoba falcons with a U.S. connection.*

38. Delta Winnipeg Hotel, Winnipeg, Manitoba. Male red 5P9 paired again with female 52V for what would have been his seventh season, her fourth. He disappeared early in the season and was replaced by six-year-old male black 1/X, who was fledged on this building in 1989 and is Maud's son and MF-1's grandson. This was a reunion for black 1/X and female 52V; they were paired and fledged two augmented young at the University of Manitoba in 1991. Each adult ultimately defected to the Delta Winnipeg Hotel when a vacancy appeared there. This year, four eggs (paternity uncertain) were produced and two young fledged.

39. McKenzie Seeds Building, Brandon, Manitoba. The same pair, four-year-old male red 7/3 and female black O/B, 1991 daughter of Maud and granddaughter of MF-1, fledged four young for the second year in a row.

*Ted Armstrong, Ontario Ministry of Natural Resources, reports that extensive forest fires in the area preempted available MNR helicopters, delaying the usual survey of peregrine eyries in Ontario north of Lake Superior until most young were already fledged. Here is the 1995 information available, reported by Gail Jackson and Armstrong, both with the Ontario MNR. None of the young were banded.*

40. Mt. McKay, near Thunder Bay. Three eggs, incubation in progress, June 13; three young fledged. Adult male identified, red O/K, released at nearby Sturgeon Bay in 1989, according to Gail Jackson. This is the third year that this territory has produced young.

41. Lake Superior Park, east end of Lake Superior. Three young in nest, June 24; at least two fledged.

42. Sibley Peninsula. One peregrine present on May 22. At least two young were fledged here in 1995. On August 19, male 02X fledged wild in 1990 at Palisade Head, Minnesota, was netted at a banding station at the tip of Sibley Peninsula at 10 p.m., apparently chasing bats. He may be one of the peregrines seen in summer and probably nesting on the peninsula for the past five years.

43. Nipigon River, Ruby Lake. Pair present, nest not located. Three falcons were seen here in summer, suggesting that at least one young fledged. This is the fifth year this territory has been occupied.

#### **BREEDING PAIRS, OUTCOME UNKNOWN**

44. Pie Island #1. Peregrines seen, no information on age or nesting success.

45. Pie Island #2. Peregrines seen, no information on age or nesting success.

#### **UNSUCCESSFUL BREEDING PAIRS**

(Eggs laid, no young fledged)

46. Bong Bridge, Duluth, St. Louis County, Minnesota. For the sixth year, peregrines were present here. Bong female 34R nested for the fifth year, possibly paired with a new unidentified male. Dave Evans reports that four eggs were laid, but the nest failed by May 21, when the eggs were scattered outside the scrape. The new male seemed to Evans to be not very attentive to the female or the nest site.

47. Porcupine Mountains Wilderness State Park, five miles west of Silver City, Ontonagon County, Michigan. Peregrines have nested here for six years. Joe Rogers reports that this year the first nest failed in extreme heat on this south-facing cliff. The pair probably renested, but failed again. The adults were not identified.

[Pictured Rocks National Lakeshore, near Munising, Alger County, Michigan. Although a pair nested here in 1994, no nest was found in 1995, according to Brian Kenner, National Park Service biologist. Possibly the pair which nested this year at nearby Grand Island (pair 19) was the 1994 Pictured Rocks pair.]

48. New Center, Detroit, Wayne County, Michigan. Judy Yerkey reports that two-year-old female "H" b/r 6/H, wild-produced in Pittsburgh, Pennsylvania, paired with three-year-old male C.J. 27N, hatched at Racine, Wisconsin, in 1992. They nested twice; the first with four eggs failed around April 10 before hatching, the second produced at least two chicks around June 5, but both were gone on June 28. Heat, high humidity, and heavy storms may have caused the loss of the chicks.

Male C.J. 27N was found injured near the New Center on September 11; he died that day.

49. Woodman Tower, Omaha, Douglas County, Nebraska. John Dinan and Jeanine Lackey, Nebraska Game and Parks Commission, report that female 84R laid six eggs (presumably infertile) in late March, before male 54T showed up. This was the second year of nesting for this pair at this site. They produced three eggs; one hatched May 28, one disappeared the same day, the third egg was broken on June 6, and the single chick died on June 7. Because of the unexplained outcome of the nesting attempt and because no chicks were readily available, it was decided to forego augmentation.

50. Wacker and Michigan, Chicago, Cook County, Illinois. Mary Hennen reports that this pair, the "river pair," is in its second year, having lost their clutch in 1994 to heavy rains. In 1995, two eggs were laid by March 31 on the same ledge as in 1994; again the nest was rained out in early incubation. No re-nesting was attempted, despite the availability of a nest box placed on the building in 1994. The female has a black band on her left leg, \_2V; the male also has a black band on his left leg, \_7\_.

51. Lakewood, Cleveland, Cuyahoga County, Ohio. Dave Scott, Ohio Division of Wildlife, reports that juvenile female Athena 5/V, hatched in 1994 at Rochester, New York, paired with male Buckeye 3/1. An egg was laid on the private balcony nest site by early June with incubation noted by June 5, and perhaps earlier. On June 15, only one egg was present; it was candled and found to be infertile. This is a new nest site.

52. City Hall, Kansas City, Jackson County, Missouri. John Meyer reports that an unidentified pair laid at least one egg in loose gravel on the 25th floor parapet, but the nest failed by mid-May because of flooding in a thunderstorm. The site has been modified to make it more storm-proof.

53. Fort Garry Hotel, Winnipeg, Manitoba. This new site is only one kilometer from the Delta Winnipeg Hotel, a peregrine nest site since 1989. The female is red A/4, released in Brandon, Manitoba, in 1992; the male is unbanded. Two eggs were laid by May 25, but rolled off the ledge by June 7. The pair then moved to the Manitoba Legislative Building in Winnipeg, where they remained as of mid-August.

#### **TERRITORIAL PAIRS, NON-BREEDING OR STATUS UNKNOWN**

54. NSP Prairie Island, Goodhue County, Minnesota. One-year-old female E/C, fledged wild in 1994 at Cedar Rapids, Iowa, paired with male Malin 0/\*7, fledged wild from the Multifoods Tower, Minneapolis, Minnesota, in 1993. They produced no eggs. Bob Anderson, RRP, put dummy eggs in the nest box which both adults incubated. The day before Anderson arrived with two young to substitute for the dummy eggs, the adults abandoned the venture and the female disappeared from the site.

Peregrines were also seen several times in May and June in Red Wing, Minnesota, probably visitors from the Prairie Island site, about seven miles up river.

55. University Bridge, St. Cloud, Stearns County, Minnesota. Al Grewe reports that a pair was present in early April. The female was not identified, but the male is St. Pauli Boy 76Z. On April 16, according to Ben Baloun, three

peregrines were seen at a water tower at the nearby St. Cloud state prison. Two grappled and fell to the ground; the third bird was larger. On April 28, a single male was at the tower. Tordoff identified him as St. Pauli Boy. He continued to visit the tower intermittently until about May 10, Baloun reports. No nesting was attempted at the bridge or the prison. Grewe reports that two peregrines were seen intermittently all summer, mostly along the river in the St. Cloud area but also at the prison tower, and were still present in September.

56. Blatnik Bridge, Duluth, St. Louis County, Minnesota. Dave Evans reports that male Dave red 6P3, now nine years old, paired with an unidentified new juvenile female. They did not nest, as far as Evans could determine.

An adult female, perhaps the old one here, 85R, was observed ten days prior to the arrival of male 6P3 but was gone when he arrived. Evans speculates that she may have paired with the old male, Pagan 22Y, at the Bong Bridge and left the area.

57. Tower Bridge, Green Bay, Brown County, Wisconsin. An unidentified pair of peregrines (female juvenile, male adult wearing two bands) were present here through the nesting season. Nest boxes have been placed on the bridge and on the nearby WPS Pullian Power Plant. Apparently no eggs were laid.

58. Trap Hills, Bergland, Ontonagon County, Michigan. Joe Rogers reports that no peregrines were seen here this year. The site is still included here until additional evidence of its state of occupancy is available.

59. Lakeview, Cook County, Chicago. Mary Hennen reports that a pair of unidentified adults (the female is unbanded) was present. This is the second year this site has been occupied, with no nesting yet.

60. Port of Indiana, Porter County, Indiana. John Castrale reports that a pair of peregrines were reported on several occasions in February. The female flushed from a nest box on a grain elevator in early May. The pair then shifted their activity to a nest box on a smokestack one mile to the east and were seen there through at least July. Neither bird has yet been fully identified, nor was there evidence of nesting.

61. Evansville, Vanderburgh County, Indiana. Male Screech 2/\*L overwintered here after rehabilitation at TRC and release. Female Phoenix U/Y, hatched here in 1994, returned on February 25. The pair remained through spring and summer but did not nest.

62. Fort Wayne, Allen County, Indiana. Female Freedom U/\*8, released in Evansville, Indiana, in 1994, paired with male Bandit 1/\*1, released in 1993 in Birmingham, Alabama. First noted in late March, the pair copulated but did not nest. They remained through the summer and visited a nest box on the Summit Center building.

63. PNC Building (renamed, formerly Central Trust Tower), Cincinnati, Hamilton County, Ohio. A pair was present early, according to Dave Scott, but the adults were not identified and no nesting attempt was verified.

64. Southwestern Bell, St. Louis, St. Louis County, Missouri. Walter Crawford reports that a pair was present but unidentified. No nest was located. This has been an active site since 1991.

65. Mary Speechly Hall, University of Manitoba, Winnipeg, Manitoba. A new male, black 9/3, joined female red E/H, her fourth year here. They failed to produce eggs of their own and were given two fostered chicks but refused to feed them.

66. Offshore Islands, Nipigon Bay, Ontario. Ted Armstrong reports that two peregrines were seen here in summer, but their territorial status is undetermined.

67. Slate Island, Lake Superior, Ontario. A pair of peregrines was present here in September, according to Ted Armstrong. Again, their territorial status is undetermined.

### **SINGLE TERRITORIAL FALCONS**

68. La Crosse, La Crosse County, Wisconsin. Pat Skewes, Wisconsin DNR, reports that Libby 2/2 nested here unsuccessfully in 1993 and was present here alone in 1994. On April 1, 1995, she was picked up in downtown St. Paul injured, most likely by the resident peregrines, Meg 12R and/or Spanky 04T. Recovered after a seven week stay at TRC, she was released in Racine, Wisconsin, on May 25, in the hope that she would pair with male Joshua O/\*A. She had other ideas, however, and was seen back in La Crosse on June 9.

69. Racine County Courthouse, Racine, Racine County, Wisconsin. An adult male, thought to be Joshua O/\*A, augmented to the wild nest in Sheboygan, Wisconsin, in 1993, was here through the spring and again in early August.

70. Park Place Apartment, Irving Park, Chicago, Cook County, Illinois. Mary Hennen reports that a single peregrine was in residence on the Park Place Apartment building throughout the season. A nest box is available.

### **SUMMARY OF PEREGRINE NESTING IN 1995**

Summing up the natural breeding in 1995, 67 pairs were known to be on territories, 53 pairs (79%) laid eggs, 43 pairs (81% of the nesting pairs) were successful in fledging 118 young, 2.7 young per successful pair, 2.2 per nesting pair, 1.8 per territorial pair.

Of the 67 territorial pairs, 14 (21%) were on cliffs, 41 (61%) were on buildings, five (7%) on smokestacks, six (9%) on bridges, and one under a highway overpass. Twenty-seven of the 41 building pairs succeeded, as did the highway pair. Two bridge pairs fledged one young each, and four failed. The five smokestack pairs fledged 15 young. Of the 14 cliff pairs, two failed, eight are known to have succeeded, and the outcome is unknown for the other four.

Of the 118 young known fledged in the wild, all were banded except three at Toledo, Ohio, one at the Interstate Highway 270 Bridge, St. Louis, Missouri, one at NSP Blackdog, Eagan, Minnesota, and those fledged from cliffs in western Ontario. Additional unbanded young may have been fledged at the Ohio River bridge at Louisville, Kentucky, and, of course, at unlocated nests.

## PEREGRINE RELEASES IN 1995

### Ontario

North Shore of Lake Superior. Thirteen peregrines from the Canadian Wildlife Service were released by the Ontario Ministry of Natural Resources on the Sibley Peninsula with the help of the Thunder Bay Field Naturalists, according to Ted Armstrong, Ontario MNR. All survived to independence.

### Kentucky

E.W. Brown Generating Plant, Burgin, Dix River Gorge/Herrington Lake, Mercer County. Eleven young peregrines from the South Dakota Raptor Trust were released here by the Kentucky Department of Fish and Wildlife, in the third year of a five-year program, according to Laura Burford. A one-year-old male, River Ace 7/\*A, hacked in 1994 at Evansville, Indiana, was successfully hacked again here after spending the winter in rehabilitation at TRC for a fractured scapula and a bruised foot. A young unbanded wild female (now banded M/\*L) found grounded just after fledging at the Ohio River railroad bridge at Louisville (pair 37), was also released here with the young captive-produced falcons, three of which were lost to Great Horned Owls and one when trapped in a cooling tower.

### Michigan

Consumers Power Plant, West Olive, Ottawa County. Five young peregrines from the Raptor Resource Project were hacked from a tall building here on the east shore of Lake Michigan. All survived to independence.

In sum for 1995, 118 young were fledged by wild pairs and 29 young were released from captive pairs, for a total of 147. Of the 29 hacked young, 24 lived to independence.

## GENETIC ANALYSIS

We continued collecting blood in 1995 from all released young and from all wild young banded, and from whatever wild breeders were handled. The goal is to measure inbreeding, outbreeding, genetic variation, changes in occupancy of territories, dispersal of adults and young, success of the different genetic stocks introduced, and long-term development of genetic structure in the new midwestern population.

Dr. Robert Zink and University of Minnesota student Kate Kaluzinsky began a study of changes in mitochondrial DNA with aging of individual peregrines. They are analyzing blood samples from birds of known age and, especially, multiple samples from single individuals captured more than once. It is important for this study to take a blood sample each time an adult peregrine is handled.

The peregrine blood samples collected over the years uniquely represent the history of the population. Only a handful of study skins and skeletons, acquired randomly, have been preserved, in contrast to the nearly full coverage of blood samples available. The blood specimens are in the permanent tissue collections at the Bell Museum of Natural History, University of Minnesota, where they are available for genetic and other analyses in the future.

## PLANS FOR 1996 AND BEYOND

Annual increases in territorial pairs from 1987 through 1995 show rapid growth earlier and recent leveling off of the peregrine population.

Year	Pairs	Increase	% increase
1987	6		
1988	13	7	54%
1989	16	3	19%
1990	23	7	30%
1991	30	7	13%
1992	37	7	19%
1993	53	16	30%
1994	62	9	15%
1995	67	5	8%

Releases of captive-produced peregrines from 1989-1992 averaged 104 per year, accounting for the big jump in territorial pairs in 1993. In the past two years, most new territorial birds have been wild-produced. Numbers of wild-produced young from 1993-1995 have averaged 107 per year; the wild peregrines are now producing as many young each year on their own as we did in the peak years of releases, which should guarantee continued growth to current carrying capacity. As that is reached, some inevitable combination of increased mortality and/or decreased productivity will cause the population to level off.

While the absence of pairs on the cliffs of the Mississippi and its tributaries remains a major disappointment, perhaps it is time to look at the situation from a different perspective. What makes cities so attractive to these peregrines? The obvious answer is safety from predators and food. Pigeons and other prey are plentiful, and boxes or gravel-filled trays provide secure nest sites. Tall buildings provide great vantage points for hunting. Urban peregrines may simply do better today than the original stock did on cliffs, just as Purple Martins, Barn Swallows, and Chimney Swifts have flourished using human-built structures instead of natural sites.

The heavy use of urban nest sites provides an extra measure of security: many building owners and other urban residents are fiercely protective of "their" peregrines. Others, of course, see peregrines, particularly aggressive individuals, as a problem, but the balance is clearly in favor of long-term use of man-made structures. Urban mortality is almost entirely limited to accidents, attacks by territorial peregrines, poisoning intended for pigeons, and, in some places, intentional killing by pigeon fanciers. Weather causes some loss of eggs and young in cities, but this is almost eliminated when peregrines accept well-situated nest boxes.

Our major immediate tasks remain the same. We must try to: --Identify all breeders.

--Band all wild young produced.

--Collect and analyze blood from all young produced.

--Manage city pairs so that production of young, enthusiastic cooperation of building managers, and public appreciation of the falcons are all fully enhanced.

--Try to find effective ways to help peregrines re-establish themselves on the river cliffs and on suitable cliffs elsewhere in the region.

--Collect, coordinate, and circulate information among the Midwest peregrine workers through reports, meetings, and regular informal contacts.

### **ACKNOWLEDGEMENTS**

The Midwest Peregrine Project is a cooperative effort involving many people and organizations. The University of Minnesota provides the overall coordination and administration of the project through Dr. Pat Redig of the Raptor Center and Dr. Bud Tordoff of the Bell Museum.

Support for the Minnesota part of the effort is provided by:

- BCED Minnesota
- Big Game Club Special Projects Foundation
- Farm Credit Leasing
- Iron Range Resources and Rehabilitation Board
- Mayo Clinic
- Minnesota DNR Nongame Wildlife Program
- Minnesota DNR Parks and Recreation
- Minnesota Department of Transportation
- Minnesota Falconers Association
- Minnesota Power and Light Company
- Montgomery Ward Company
- Northern States Power Company
- Northwest Airlines
- Raptor Resource Project
- The Shelard Group
- U. S. Fish and Wildlife Service
- U. S. Forest Service
- Wolf Ridge Environmental Learning Center

Each cooperating state or provincial agency has, in addition, its own list of cooperators. Falcons for release were obtained from the falcon breeders listed below.

### **BREEDERS SUPPLYING PEREGRINES FOR 1995 RELEASES**

- Canadian Wildlife Service
- Robert Anderson, Raptor Resource Project, Hugo, Minnesota
- Victor Hardaswick and Don Hunter, South Dakota Raptor Trust, Centerville, South Dakota

**PEREGRINE POPULATION GROWTH IN THE MIDWEST**

Year	Hacked yg.	Terr. pairs	Nest. pairs	Succ. pairs	Young fldgd	Yg/t pair	Yg/n pair	Yg/s pair
81-86	102	4	1	0	0	0	0	0
87	68	6	3	1	1	.17	.33	1.0
88	84	13	8	6	12	1.1	1.5	2.0
89	116	16	12	9	22	1.4	1.8	2.4
90	83	23	16	13	33	1.4	2.1	2.5
91	110	30	22	17	36	1.2	1.6	2.1
92	104	37	32	23	68	1.8	2.1	3.0
93	20*	53	43	33	87	1.6	2.0	2.6
94	42*	62	51	41	116	1.9	2.3	2.8
95	18*	67	53	43	118	1.8	2.2	2.7

Total through 1995, 747 hacked young; 493 wild young.

Note: "Young fledged" includes all young surviving to first flight from nest.

\* Does not include peregrines released in Kentucky, Tennessee, Alabama, and Arkansas, in order to make comparisons with earlier years meaningful.