2016 Raptor Resource Project Banding Report



Banding at Castle Rock. Photo courtesy John Howe

2016: A Year Of Change

2016 was a year of tremendous change for us. As followers know, we lost RRP founder and director Bob Anderson in July of 2015. Shortly before he died, Bob let us know that John Howe was to be the Project's next director. In the year since Bob's unexpected passing, John has worked diligently to keep up with camera and streaming technology, deploy cameras, expand our online educational offerings, honor Bob's legacy, and secure funding. He has more than proven himself as a director and a leader. I wish that Bob was here to see the positive change that John has brought to the Raptor Resource Project.

So what did we do in 2016? Among other things, we:

- Banded 76 falcons at 25 sites in Minnesota, Wisconsin, Iowa, and Illinois between May 20 and June 16 a record for us! The mild spring weather yielded a bumper crop of falcons. We saw plenty of bulging crops and prey remains while banding, but no hippoboscids or carnus flies, and very few blackflies. What an incredible year!
- Provided 2,361 hours of online interaction on our Decorah and Decorah North Ustream channels, including 449 hours of dedicated educational chat. We also posted 364 times on Facebook, wrote 31 blogs, and partnered with Ustream to provide ads-free viewing to 347 teachers and their students. Explore, our newest streaming partner, offers an ads-free stream of the Decorah North eagles at http://explore.org/live-cams/player/decorah-eagles-north-nest
- Partnered with Brett Mandernack at Eagle Valley to install tracking platforms on D24 and D25 Thanks to the platforms, we know that D25 was killed in a collision with a car in September, but D24 is still going strong! His travels can be followed here: https://www.raptorresource.org/eagle-map/
- Retrieved DN2's carcass from the Decorah North Nest after he died of a suspected poisoning. An autopsy at Iowa State University revealed that he had been killed by methomyl. Read more on that: https://raptorresource.blogspot.com/2016/07/dn2-autopsy-report.html
- Installed a total of six new cameras and four microphones at N1, N2B, Decorah North, and Great Spirit Bluff. We also provided technical support for the Seneca Nation of Indians (a bald eagle cam) and the Marshy Point Nature Center (Marshy Point ospreys).
- Reported to and shared data with the Bird Banding Lab, the US Fish and Wildlife Service, the Midwest Peregrine Falcon Society, state Department of Natural Resources, and the Boulder County Audubon Society.

There was so much to learn and do, and so little time to learn it and get it done! But with the help of our board and volunteers, we got through our first year without Bob and are looking to the future. So what do we have planned for next year?

- Education in action: Education is a key component of our mission. We plan to expand RRP's educational offerings through the use of video, interactive technologies like Skype, online curricula, short movies, and other ways to reach out to learners of all ages and circumstances. With new technologies becoming available seemingly every day, the sky is the limit!
- Fostering the next generation: We are exploring an educational endowment in Bob Anderson's name. An educational endowment seems like an appropriate way to honor Bob's legacy and foster of a new generation of preservationists and researchers!
- Connecting people with the natural world: We need to keep our streams accessible and available through a wide variety of devices. How can we be more inclusive? How can we better support the people who watch 'their' eagles and other birds? What kind of technologies are appropriate? We will keep looking for the best answers and solutions.
- Hiring John Howe! Thanks to your support, John will become our full-time director beginning on January 1, 2017. It will be nice for him to have just one job...and good for us, too!

Thank you for staying with us in 2016. We hope you enjoy reading our banding report!

Acknowledgements

We wrote the Raptor Resource Project's 2016 Banding Report to provide formal banding data for collection and study, and to share our observations and experiences with our friends and supporters. I would like to thank the many people who helped us this year by identifying falcons, tracking hatch dates, emailing pictures and observations, helping with banding, and gifting us with donations. You are a crucial part of what we do.

Many thanks to our forum members. Your postings, comments, and contacts document behavior at our nests and help us maintain an increasingly complicated calendar. You are very helpful in our efforts to monitor nests and babies, for which we are deeply grateful. Especially me!

Education is part of our mission. A deeply heartfelt thanks to our moderators on Ustream and Facebook – especially Ustream lead mods jfrancl, Faith, and GardenGirl, and Facebook lead mod Sherri Elliott. Your leadership, dedication, and hard work are a vital part of our success. A shoutout to Pagent for her very hard work organizing the After the Fledge party. Our mods volunteer long hours and are an invaluable source of information and inspiration for millions. Thank you so much for your hard work, knowledge, and experience. We are deeply grateful for the best moderating teams around!

A thanks also to the people who capture and post video to YouTube, especially 70chico1, mochamama, blossom holland, eaglewhisperer18, prairiefirewind, Arlene Beech, and Juanita Roper. Your hard work makes sure no one misses life in our nests.

We couldn't follow our eagles without Brett Mandernack! A very special thanks to Brett, the Eagle Valley staff, and David and Ann Lynch for their hard work trapping D24 and D25 and sharing data and maps with us. It isn't always easy to follow our eagles once they leave the nest, but we have learned so much we would never have known without you.

Power plants, stackhouses, and other industrial sites have been crucial to the recovery of the peregrine falcon. We really appreciate the staff that help us get it all done, including Tina Lopez, Becky Danberg, Cheryl Ehrler, Dan Meyer, Frank Sperlak, Jeff Berrington, Jessica Keller, Bill Heston, Pat Donahue, John Martinez, Luke Kucilik, JP Harris, Bill Wardell, Mark Books, Dave Dunbar, Mark Jackson, Scott Anton, Lynn Hall, Dale Micheletti, Naresh Dagahama, Brad Foss, Ben Campbell, Jim Larson, Pauline Biederman, Dean Pagel, Chuck Bremer, Doug Braff, Karen Kiekow, Britt Kagay, Taylor Aaland, Trevor Shearen, Jim Fuchs, Jeff Blank, Brenda Geisler, and Tina Sklors. You guys help us monitor and band falcons at sites throughout Minnesota, Iowa, and Western Wisconsin, and we couldn't do it without you! If you don't see your name here, let me know!

A big thanks to landowners, site volunteers, and DNR staff, including Gary Grunwald, Myrna Buri, Gary and Deb Hartmann, Mark and Michelle Schnick, Joyce Caley, the Howe family, Jim and Aggie Olson, Dan and Sheila Broughtman, Wally and Tim Truttman, Stephen Grulkowski, Crystal Fauster, Maggie Jones, Bill Smith, Doug Wood, Dave Noble, Sally Bolton, Mark Rasmussen, Dean Edlin, Gary Wolf, Pat Schlarbaum, and Matt Bonar. Another shoutout to the folks at the Bird Banding Lab and the FWS. We appreciate your support and help.

A big thanks to the technical support staff at Ustream, especially Alden Fertig and Ramon Cabarrubia. A shoutout to Justin from A2Z Security for all his hard work and help as well.

Thanks, everyone for all of your hard work on behalf of the birds!

Minnesota

Xcel Energy Allen S. King Plant, Oak Park Heights MN	5
Xcel Energy Prairie Island, Prairie Island MN	6
Xcel Energy Riverside Plant, Minneapolis MN	
Xcel Energy Sherco, Becker MN	
Minnesota Power and Light Clay Boswell Energy Center, Cohasset, MN	
Minnesota Power and Light Hibbard Plant, Duluth MN	
3M Watertower, Cottage Grove MN	
Ardent Milling, Lake City MN	
Red Wing Grain, Red Wing MN	
Rob's Nestbox, Greysolon Plaza, Duluth MN	
P-17 (Great Spirit Bluff), Dresbach MN	
P-4 (Homer Bluff), Homer MN	

Wisconsin

Xcel Energy Bayfront Plant, Ashland WI1	
Dairyland Power 12-Mile Bluff, Alma WI1	LO
Dairyland Power Genoa, Genoa WI1	
US Bank, LaCrosse WI	20
Castle Rock Cliff, Trempealeau County WI	21
Diamond Bluff, Diamond Bluff WI	
Maassen's Bluff, Nelson WI	22
Twin Bluff, Nelson WI	

lowa

P-15 Alliant Energy Lansing Cliff, Lansing IA	24
Bunge North America, McGregor IA	
Bellevue State Park, Bellevue IA	
411 Hamilton Building, Peoria IL	

Productive unbanded sites

West Bluff, Maiden Rock MN	27
Aggie's Bluff, Lansing IA	
Shellhorn Complex: Brownsville MN	27
Lynxville Complex: Monehen Bluff, Lynxville WI	27
Unproductive sites and sightings	
Wyalusing Quarry, Wyalusing WI	28
Greshik's Bluff, Fountain City WI	28
Waukon Complex: Leo's Bluff, Waukon Junction IA	28
Glen Haven Cliff, Glen Haven WI	28
Maiden Rock, Maiden Rock WI	28
Great River Energy, Elk River, MN	29

Bald Eagles

Decorah Bald Eagles	
Decorah North Bald Eagles	
Xcel Energy Fort St. Vrain Bald Eagles	
Get in Touch!	32

Minnesota

Xcel Energy Allen S. King Plant, Oak Park Heights MN

Seasonal Data

Location: 45.033, -92.782 Adult Female: 69/W Kris, a 2011 hatch from Minnesota Power's Clay Boswell plant in Cohasset, MN Adult Male: unknown Egg-laying began: 3/29/16 | 4 eggs laid, 3 eggs hatched Hatch began: 5/07/16 Banding date: 6/01/16 Site visits: 3/24, 6/1, 6/21

- 1947-30442 12/P Female Lauren
- 1947-30441 13/P Female Ellie
- 1156-14961 E/90 Male Tas

This is the plant where it all started. In 1988, Bob verified that a falcon was on site and got Xcel's permission to put a nest box on the 400' level of the King plant stack. In 1990 falcon Mae, a daughter of MF-1, adopted the site and the rest was history! Kris 69/W is the third falcon on site, following in the proud tradition of Mae and Belinda before her. Like her predecessors, she is a real handful – a kekking, diving terror who won't give up until the banders are gone. Fortunately, we had Bill Wardell to protect us as we retrieved the young falcons from the box. John Howe and Amy Ries banded them below with the help of Becky Danberg, a plant employee and wonderful falcon friend, and Al Lohman, an Xcel employee and long-time supporter of the falcons. All three falcons looked great!

Male E/90 was smaller but older, with more developed pin feathers on his wings and poking through the down on his body. He was also a real handful despite his bigger and more docile sisters – an aggressive and very footy little falcon! He may have been smaller, but it seems like he probably ruled the roost nonetheless. Thanks to Becky Danberg, Bill Wardell, and Al Lohman for all of their help and support! Footage of the banding can be watched at the CBS Local website: <u>http://minnesota.cbslocal.com/2016/06/01/raptor-project-bands-falcon-hatchlings/</u>

Year falcons first nested: 1989 | Total number of young produced (2016): 67





Xcel Energy Prairie Island, Prairie Island MN

Seasonal Data

Adult female: unknown. Very faded unreadable black/green band Adult male: unknown 5 eggs laid, 5 eggs hatched Hatch date: 5/12/16 (estimated). Four roughly same age, falcon 'Mel' much younger Banding date: 06/01/16 Site visits: 6/1

- 1947-30440 14/P Female Lem
 1947-30439 15/P Female Artie
- 1947-30438 16/P Female Mel
- 1156-14962 E/91 Male Gordy
- 1156-14963 E/92 Male Ritchie

I love going to Prairie Island! Two years ago, Frank Sperlak installed a new nest box up on top of the dome so we wouldn't need to rappel down to get the falcons. Despite their shiny new digs, the falcons persisted on nesting in the old nest box even after it was boarded up. Frank removed the old box last fall and the falcons adopted the new one this spring, producing an incredible five young! Four of them were right about 20 days old but the last – falcon Mel – was only about 14/15 days old. Despite the large clutch, Mom and Dad were clearly keeping everyone well-fed!

We tried to get a band number on the adult female here, but her bands were too faded to read. Given the fading and black/green color, we assume this is an older female. Age sometimes impairs the fertility of older female falcons, but that is clearly not the case here.

Many thanks to Frank for his hard work at this site! The Grand Forks Herald did a very nice story about the banding that can be read here: <u>http://www.grandforksherald.com/outdoors/wildlife/4076939-5-peregrine-falcon-fledglings-take-flight-prairie-island-nuclear-plant</u>

Year falcons first nested: 1997 | Total number of young produced (2016): 62



Xcel Energy Riverside Plant, Minneapolis MN

Seasonal Data Location: 45.021, -93.275 Adult Female: unbanded Adult Male: unknown Four eggs laid, two eggs hatched Hatch began: 5/04/16 (estimated) Banding date: 5/24/16 Site visits: 2/9, 5/18, 5/24, 5/31, 9/12

1947-30449 04/P Female Rose
 1947-30450 05/P Female Roberta

Last year was a very special year for Riverside. The plant, formerly one of our most productive, came back online after a new unbanded female defeated sterile female 'Mabel', who had been on site since 2004. Bob was very happy to be able to band falcons here in 2015! A lot of plant stuff attended this year's banding, which was held up on the roof. They enjoyed the view, the aerial acrobatics of the female's territorial defense, and the fluffy white roughly 20-day old nestling falcons. Roberta (Robert A) was named in Bob's honor. In addition to falcons, Riverside is also home to a great blue heron colony, kestrels, screech owls, and a family of fox. It isn't uncommon to see bald eagles floating by and even landing to copulate in heron nests before the herons return. Riverside is truly a little wildlife oasis in the big city – an excellent example of what can happen when we make room for wildlife.

A special thanks to Cheryl Erler and JP Harris for all of their help and support at the Riverside site!

Year falcons first nested: 1998 | Total number of young produced (2016): 20



Xcel Energy Sherco, Becker MN

Seasonal Data Location: 45.375, -93.891 Adults unknown Egg laying began: 3/27/16 | 4 eggs laid, 4 eggs hatched Hatch began: 5/07/16 Banding date: 5/31/16 Site visits: 3/4, 5/31

•	1947-30444	10/P	Female	Xcella
•	1947-30443	11/P	Female	Daisy
•	1156-14960	E/89	Male	WhiteWinter

A combination of bad weather and territorial fighting left Sherco empty for two years. In 2014, the resident female laid an odd, lumpy looking white egg. She ate it after a spell of extremely cold weather and laid another that was never incubated. In 2015, a new female laid and incubated four eggs, but none of them hatched. This year, an unknown female laid four eggs and hatched three. Xcel employees and their families were invited to name the falcons and attend the banding. It was wonderful to see all of the children and everyone's real interest in the falcons. Interested children were allowed a light fingertip touch and several plant employees shared stories about their falcons and other birds they followed.

I sometimes get questions about what this site looks like. The falcons are nesting in a box at the 400'-level catwalk, which is quite large as catwalks go. The box is mounted on a platform, which means that young falcons can get out and walk around out of site of the cameras. If they end up on the catwalk during fledge, their parents will find them and feed them below. The platform, catwalk, and enclosure make a great playground for fledgling falcons.

A special thanks to Jeff Berrington and Jessica Keller for their help and support. You are great falcon friends!

Year falcons first nested: 1992 | Total number of young produced (2016): 61





Minnesota Power and Light Clay Boswell Energy Center, Cohasset, MN

Seasonal data Location: 47.259, -93.653 Adults unknown Egg laying began: 4/3/16 | 4 eggs laid, 4 eggs hatched Hatch began: 5/14/16 Banding date: 6/07/16 Site visits: 6/7/16

1947-30432 43/P Female Sunny 1947-30431 44/P Female Daisy 1156-14972 49/B Male Screech 1156-14973 50/B Male Lucky

T was great to visit Boswell again! This relatively remote power plant was among the first to produce falcons. The 200-foot climb is always a treat and the view from the nest box is spectacular. This year, we were joined by MN Power employee Linda McKeever, who really enjoyed helping with the banding and had a lot of questions about the young falcons! They were healthy, loud, and a great age for banding!

43/P broke her right radius after fledging. She was rescued by Minnesota Power employees and transported to the Raptor Center. The injury was treatable and she is a good candidate for release. Thanks to Linda McKeever, Doug Braff, Karen Kiekow, and the high angle climbing team for their hard work and dedication, and to Jeff Janecek and company for the rescue!

Year falcons first nested: 1993 | Total number of young produced (2016): 72





Minnesota Power and Light Hibbard Plant, Duluth MN

Seasonal data Location: 46.735, -92.152 Adult female: *R/*U Isabel, a 2009 hatch from the Colonnade Building in Minneapolis Adult male: unknown Egg laying began: 4/15/16 |4 eggs laid, 4 eggs hatched Hatch began: 5/24/16 Banding date: 6/24/14 Site visits: 6/24/16

- 1947-30429 64/P Female Hydro
- 1947-30410 65/P Female Gale
- 1156-23715 58/B Male Cole
- 1156-23716 59/B Male Timber

This is a fun site! The nestbox is roughly 150' over the Duluth harbor, facing the Bong Bridge. We were joined by Jennifer Faldalen, a first-time helper, and Doug Braff, an experienced helper and great falcon friend! For the first time in several years, the nest box was not filled with prey remains and, judging by what we found on the catwalk, the falcons are eating less gull. In thinking it over, this was the only site at which I remember finding a substantial number of gull remains, although that may be due to the falcons caching prey inside the nest box – one of the very few sites we've seen that at as well.

Female Isabel has a later nesting chronology than many peregrine falcons in this area. We've learned that one of the best ways to predict egg laying and banding, absent a new falcon, is to look at when they happened last year. Falcons tend to lay eggs during the same time-period year over year and Isabel is a late layer! Could the change in diet and behavior be due to a new male? I would love to get a band number and find out! Thanks to Jennifer Faldalen, Doug Braff, Karen Kiekow, Dave Ojala, and the high angle climbing team for their hard work and dedication, and to Tracy James for the names.

Year falcons first nested: 2003 | Total number of young produced (2016): 38



3M Watertower, Cottage Grove MN

Seasonal data

Location: 44.790, -92.912 Adults unknown 3 eggs laid, 3 eggs hatched Hatch began: 5/21/16 (estimated) Banding date: 5/26/16 Site visits: 5/26/16

9 1947-30447 07/P Female Mary

We always enjoy banding here! To get to the nest box, we climb a ladder up the middle of the 3M watertower, emerging through a hatch on to the top of the tower. After tying off, one person hops over the ring and retrieves the young birds from the nestbox, where they are handed back one at a time to whomever is available to help with banding. This year, 3M employee Trevor Shearen provided a helping hand and a big grin!

Note that three eggs hatched here but only one falcon remained when we came to band. This is not the first time young have disappeared from the site. We are thinking about adding recording to the existing private cam to review what is happening in the nest. Remaining eyass falcon Mary was healthy and in good shape, with a bulging crop and a healthy dose of attitude!

Thanks to Timothy Lowing and Trevor for all of their help!

Year falcons first nested: 2008 | Total number of young produced (2016): 22



Ardent Milling, Lake City MN

Seasonal data Location: 44.441, -92.271 Adult Female: *Y/*P Charlette, a 2008 hatch from Wells Fargo Bank in Bloomington MN. Adult Male: Unknown Unknown number of eggs laid, 3 eggs hatched Hatch began: 5/12/16 (estimated) Banding date: 6/02/16 Site visits: 4/14, 5/17, 6/02, 6/21

- 1947-30437 17/P Female Pam
- 1156-14964 K/15 Male Prince
 1156-14965 K/16 Male Godfrey

Ardent Milling has been very supportive of our work over the years. When old female 'Lolo' was injured, they put quail out under the direction of Bob to help augment food supply to the nest. This helped male 'Gretch' (a grandson of Mae's) feed all of the young while Lolo recovered. They are great about checking the box, reporting on the falcons, and keeping us informed. A special thanks to Jim Fuchs and the Ardent Milling team for their dedication and hard work!

Prince died shortly after fledge. It appears that he collided with something, possibly a wire, and broke his neck. Female Pam grounded on an early flight but was not injured. She gained her wings with no further incidents that we know of.



Year falcons first nested: 2002 | Total number of young produced (2016): 50

Red Wing Grain, Red Wing MN

Seasonal data Location: 44.565, -92.540 Adult Female: A/84, a 2014 hatch from the North Central Life Building in St. Paul, MN Adult Male: unknown Egg laying began: 4/12/16 | 3 eggs laid, 2 eggs hatched Hatch began: 5/23/16 Banding date: 6/14/15 Site visits: 5/23, 6/14

1947-35503 60/P Female Rosie
 1947-35504 61/P Female Sky

I love Red Wing Grain. Look downstream and you see Barn Bluff. Look upstream, and you barely see the cooling towers of Prairie Island, where falcons are nesting, and Diamond Bluff, where falcons are also nesting. Red Wing Grain was a very early site in the heart of (returned) falcon country.

On our first site visit to Red Wing Grain this year, Amy and manager Jim Larson gave a talk to students at Twin Bluffs middle school. This year was extra special since one of the eggs hatched onscreen as Amy was presenting. The students were thrilled! When Amy returned to band, she was joined by Amber Burnette from the Raptor Center, who is a great bander and all around wonderful person. She helped band and managed to get the female's band number, confirming that a new female was on site. We hope Amber joins us at some more sites next year! A big thanks to Jim, Pauline Biederman, and Dean Pagel for all of their support and enthusiasm over the years.

Year falcons first nested: 2000 | Total number of young produced (2016): 42



Rob's Nestbox, Greysolon Plaza, Duluth MN

Seasonal data

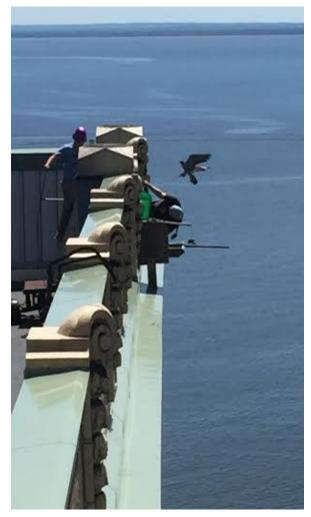
Location: 46.789, -92.095 Adult F: Canada *B/8, a 2004 hatch from Mount McRae, Ont. Adult M: Junior 89/B, a 2013 hatch from Sappi Paper in Cloquet, MN 4 eggs laid, 3 eggs hatched Hatch began: 5/17/16 (estimated) Banding date: 6/08/16 Site visits: 4/06, 5/05, 6/08, 10/14

•	1156-14974	51/B	Male	Mark
•	1156-14975	52/B	Male	Dudley
•	1156-14976	53/B	Male	Tristin

It was a great year at Greysolon! We took the little falcons down to the community room to band them this year. It was so rewarding to see the residents light up as they watched and interacted with us and with the falcons. They were fascinated by every aspect of the banding and we answered a lot of questions about these falcons in particular, falcons in general, DDT and recovery, and how and why banding was done.

We were joined by Greysolon property manager Tina Sklors, who arranged the room for us; author, photographer, video maker, and naturalist Dudley Edmondson, and Janelle Long and staff from Hawk Ridge. Dudley made a great video of the banding that can be watched at

<u>https://vimeo.com/171169634</u>. You can check out more of his work at <u>http://www.completepicturemedia.com/</u>. We visited the box on October 14 to replace gravel.



Year falcons first nested: 2003 | Total number of young produced (2016): 39 | Total sites in complex: 2





P-17 (Great Spirit Bluff), Dresbach MN

Seasonal data

Location: 43.871, -91.320 Adult Female: P/87 Michelle, a 2005 hatch from Maassen's Bluff south of Nelson, WI Adult Male: Unbanded, referred to as 'Newman' Egg laying began: 3/27/16 | 4 eggs laid, 4 eggs hatched Hatch began: 5/06/16. All four hatched the same day Banding date: 5/29/16 Fledge dates: 6/11, 6/14, 6/14, 6/19 Site visits: 5/29, 10/7, 10/13

1947-30445 09/P Female Vicki 1156-14933 E/45 Male Asher 1156-14958 E/46 Male Charlie 1156-14959 E/88 Male Alex



Great Spirit Bluff is owned by RRP director John Howe and is what originally drew him into working with our program. It is a spectacularly beautiful site that the family put into a conservation easement instead of the open market, preserving it into perpetuity. It also has a wonderful falcon cam where we trial a lot of our technology before deploying it elsewhere. While the cam is offline now thanks to lightning damage, visitors early this year were treated to outstanding shots of the falcons and river valley, especially during and shortly after fledge. The cam should be back in October and can be watched at www.ustream.tv/greatspiritbluff.

It was fun to watch the Howe family interact with the nestling falcons. Most of the teenagers would have been toddlers or young children when the site became active eleven years ago. It is good to see that they haven't lost their enthusiasm for and interest in the falcons!

Bob had pointed out to us that male peregrines tend to fledge a little earlier than female peregrines. That was certainly the case here! While all four falcons hatched on the same day, female Vicki fledged 4 to 8 days later than her brothers. We will be watching for this at other sites.

Year falcons first nested: 2005 | Total number of young produced (2016): 39



P-4 (Homer Bluff), Homer MN

Seasonal data Location: 44.023, -91.576 Adults unknown Unknown number of eggs laid, unknown number of eggs hatched Hatch began: 5/02/16 (estimated) Banding date: 5/29/16 Site visits: 3/18, 4/14, 5/29

•	1947-30946	08/P	Female	Kris
•	1156-14934	E/43	Male	Greg
•	1156-14957	E/44	Male	Billy

This site was a challenge! The falcons are nesting in a pothole with a large 'front porch' connected to another large chamber by a very long, narrow tunnel. Amy rappelled down and was unable to get them – not by crawling into the hole, not by throwing in webbing for them to foot and draw out, and not with a 'footing stick'. She came up and Dave went down. He managed to retrieve them, although it cost him some skin! New property owners Deb and Gary Hartmann were thrilled to meet 'their' young falcons and enjoyed helping us band. It was great to introduce new people to the wonder and beauty of falcons!

While Amy didn't retrieve any live falcons, she did find the badly decomposed body of a falcon we banded here in 2014 while fishing around with the 'footing stick'. The falcon appeared to be missing from the pelvic girdle up. While we don't know for sure, it may have fallen victim to predation sometime after we banded it. This is one of a handful of sites we are considering adding a small offline trail cam to for data collection.

Year falcons first nested: 2007 | Total number of young produced (2016): 16 | Total sites in complex: 2



Deb holding a roughly 28-day old falcon for banding. Note the flight feathers poking through the down.

Wisconsin

Xcel Energy Bayfront Plant, Ashland WI

Seasonal data

Location: 46.587049, -90.900737 Adults are unbanded Number of eggs laid: unknown. Number hatched: three Hatch began: 5/26/16 Banding date: 6/16/16 Site visits: 5/5, 6/16

•	1947-35505	63/P	Female	Dany
•	1947-35506	62/P	Female	Cari
•	1156-23714	57/B	Male	Talon

Amy, Lynn Hall, Dale Micheletti, Amy's son Isaac, and Dale's daughter Caitlyn banded three falcons on the roof of the Ashland plant. The two older sisters were feisty, footy little monsters! I have to think that the two of them rule the nest box! Their younger brother immediately adopted a more submissive posture and was much easier to handle.

I noticed this year that aggressive footy males in mixed-sex clutches tended to be older than their sisters, while submissive males tended to be younger. I'm guessing that size might be part of the puzzle, since first hatches would be larger and more mobile than nest mates for the first couple of weeks or so, especially if hatches were spaced out. We'll have to watch for this more closely next year.



Year falcons first nested: 2016 | Total number of falcons produced (2016): 9 | Total sites in complex: 2





Dairyland Power 12-Mile Bluff, Alma WI

Seasonal data Location: 44.308, -91.910 Adults unknown Unknown number of eggs laid, four hatched Hatch began: 5/14/16 (estimated) Banding date: 6/05/16 Site visits: 3/18, 4/14, 6/05

•	1947-30435	19/P	Female	Joyce
•	1947-30434	38/P	Female	JoAnn
•	1947-30433	39/P	Female	Virginia
•	1156-14970	K/21	Male	Neve

Thanks to Ben Campbell and his wife for showing up early on Sunday morning to get us up to the cliff! Amy, Dave, and John descended to the extremely large nest box in a pothole on 12-Mile bluff immediately behind the Alma plant. The box was installed by a team working with former Raptor Center director Pat Redig. They built it up top and lowered the complete structure down the cliff – really amazing given its size! This is a great spot to band – the deep pothole provides a nice ledge to sit and work on and the view is spectacular. The young falcons were healthy and very interested in avoiding us – they all ran to the back of the box and it took Dave a bit of work to get them!

Year falcons first nested: 1997 | Total number of young produced (2016): 71 | Total sites in complex: 4



Dairyland Power Genoa, Genoa WI

Seasonal data

Location: 43.558, -91.231 Adult Female: 32/V Peta, a 2012 hatch from the Busch Agricultural Complex in Manitowoc, WI Adult Male: 40/N Lucas, a 2004 hatch from Dairyland Power Alma in Alma, WI Four eggs laid, four eggs hatched Hatch began: 4/28/16 (estimated) Banding date: 5/20/16 Site visits: 5/20/16

- 1947-20060 00/P Female Junebug
- 1947-20059 01/P Female Eden
- 1947-20058 02/P Female Sierra
- 1156-14930 E/38 Male Gentry

Dairyland Genoa was the first site we banded this year – an interesting change, given that previous female 'Roschen' had a later nesting chronology than current female Peta. Thanks to banding and band ID, we've learned that different females can have very different nesting chronologies within a roughly one-month period. This is helpful to know when calculating dates for sites that don't have cams. While there is always a risk that a current female has been replaced by a new female, last year's banding date is the best way to set this year's banding date absent any other data.

The young falcons looked healthy and had nice, full crops. Thanks to Brad Foss and Ben Campbell for the help – you guys are great falcon friends!

Year falcons first nested: 1998 | Total number of young produced (2016): 58



US Bank, LaCrosse WI

Seasonal data Location: 43.813, -91.253 Adults unknown Unknown number of eggs laid, four hatched Hatch began: 5/12/16 (estimated) Banding date: 6/06/16 Site visits: 3/18, 4/14, 6/06, 10/7

•	1156-23708	К/22	Male	Bracken
•	1156-23709	K/23	Male	Diver
•	1156-23710	K/24	Male	Pippa
•	1156-23711	K/25	Male	Robert

This is a fun site, since you enter via a US Bank lobby and take a regular passenger elevator to gain roof access. The nestbox is mounted on the outside of the building, right below the roofline and is reached by ladder from the inside wall. The falcons can be easily watched from the top of La Crosse City Parking Garage right next door, or from a monitor just inside the building's lobby.

The first three falcons were named by children who attended the banding and the last one was named in honor of Bob. We visited the site on October 10 to replace gravel and put a new top on the nest box. All four falcons looked well-fed and healthy, with healthy attitudes to match! Thanks to building supervisor Jeff Blank for taking such good care of the site and keeping us up to date!

Year falcons first nested: 2006 | Total number of young produced (2015): 28



Photo credit Peter Thompson, La Crosse Tribune.

Castle Rock Cliff, Trempealeau County WI

Seasonal Data

Location: 44.079, -91.642 Adults unknown Unknown number of eggs laid, three eggs hatched First hatch: 5/11/16 (estimated) Banding date: 6/02/16 Site visits: 3/18, 4/14, 5/17, 6/02

•	1947-30436	18/P	Female	Teghan
•	1156-14966	K/17	Male	Stephen

This site is visible from Bay State Milling in Winona, MN and falcons nest either here or there. They have not nested here since 2011 – an absence of five years! – so we were very happy to see them back on the Rock in 2016. We suspect a new female took over given the change in location and the number of offspring produced. The falcon nesting at Bay State Milling produced five eggs every year since 2011, the year she took over the site. While we don't know how many eggs the female at Castle Rock produced, there were just three eyasses present when we arrived to band them: two living and one dead. The dead falcon was intact and did not show any signs of physical damage that Amy could see.



The Castle Rock eyrie is huge and slightly overhung, which protects the young falcons but makes it challenging to get to. Instead of descending directly to the pothole, climbers need to descend to a ledge below it and climb up. Fortunately, the eyrie provides plenty of room to work once it is attained, although it also gives young falcons plenty of room to escape! A hundred thanks to landowner Steve and his daughter Teghan for allowing us to cross their land and giving us a hand with banding. Teghan looked like a seasoned pro: as the photo above shows, she held the falcons and controlled their wings and feet without gripping their chests too tightly. Thanks also to Doug Wood from Fountain City for his help in making this banding possible. All of you are great falcon friends!

Year falcons first nested: 2002 | Total number of young produced (2016): 30





Diamond Bluff, Diamond Bluff WI

Seasonal data Adults unknown Unknown number of eggs laid, one addled, two hatched Hatch began: 5/19/16 (estimated) Banding date: 6/09/16 Site visits: 3/7, 3/18, 5/17, 6/09

•	1947-30403	46/P	Female	Ceres
•	1156-23713	56/B	Male	Tim

Falcons have nested in three different places at this lovely cliff since 2011. They nested in a nest box in 2011, a small pothole on the front side of the cliff from 2012-2015, and a large pothole near the top in 2016. While we no longer have a goat hazard here, it does require rappelling off a device attached to a truck's tow hitch – a very odd feeling that resulted in several calls for checking parking brakes, emergency brakes, and the device itself! But the banding went off without a hitch and the pothole was very easy to get to. The young falcons looked good and were surprisingly docile during banding.

Thanks to the Truttman family for all of their support!

Year falcons first nested: 2011 | Total number of young produced (2015): 7 | Total sites in complex: 3

Maassen's Bluff, Nelson WI

Seasonal data

Location: 44.383, -91.962 Adults unknown Unknown number of eggs laid, three hatched Hatch began: 5/19/16 (estimated) Banding date: 6/09/16 Site visits: 3/18, 4/14, 4/18, 6/09

•	1947-30430	45/P	Female	Maestra
•	1156-23722	41/B	Male	Marcus
•	1156-23721	42/B	Male	Gary

We were joined by Gary Grunwald, the Maassen's Bluff landowners, WI DNR staff Brian Brecka and Nick Schroeder, and John's son Jonathan. It was very nice to include the landowners, whom I don't believe we have ever met before! Dave went down to brave Mrs. Mamba, John topped, and Amy banded. A very successful and enjoyable year at one of the very early Mississippi river cliffs to become productive.

Year falcons first nested: 2001 | Total number of young produced (2016): 22 | Total sites in complex: 3



Twin Bluff, Nelson WI

Seasonal data Location: 44.418, -91.998 Adults unknown Unknown number of eggs laid, four eggs hatched Hatch began: 5/04/16 (estimated) Banding date: 5/25/16 Site visits: 3/7, 3/18, 4/14, 5/25

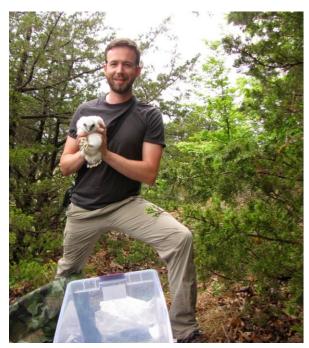
1947-30448	06/P	Female	Tasha
1156-14936	K/14	Male	Jennings
1156-14935	E/41	Male	Dennis
1156-14971	E/42	Male	Jack
	1156-14936 1156-14935	1156-14936 K/14 1156-14935 E/41	1156-14936 K/14 Male 1156-14935 E/41 Male

Dave, John, and Amy were joined by land owner Myrna Buri, Andrew Norman from the World Wildlife Trust, and Myrna's neighbor Gary Christopherson. Dave quickly rappelled down to the nest box between thunderstorms and Amy hurried to band the nestlings up top with the help of Andrew and Gary. A bluff is no place to be in a thunderstorm!



Amy and Neil Rettig installed the Twin Bluffs box in 2009 at the request of Myrna and her husband Dennis. While falcons were spotted here several times, the box wasn't productive until 2014, when the falcons produced three young. Twin Bluffs is really neat – the falcons have a great view and wonderful hunting grounds in the Tiffany Bottoms. The box was filled with small black feathers and the falcons were clearly eating well. A huge thanks to Myrna for her enthusiasm and help and a special happy birthday to Dave. What a great way to spend a birthday!

Year falcons first nested: 2014 | Total number of young produced (2016): 11





lowa

P-15 Alliant Energy Lansing Cliff, Lansing IA

Seasonal data Location: 43.334722, -91.164167 Adults unknown Unknown number of eggs laid, four hatched Hatch began: estimated 5/17/16 Banding date: 6/06/16 Site visits: 4/11, 6/06

•	1947-35502	40/P	Female	Shamal
•	1947-30401	41/P	Female	Ostria
•	1947-30402	42/P	Female	Robin
•	1156-23712	43/B	Male	Webber

Dave, Amy, and Dave's friend Mark Webber banded here this year. Mark is an accomplished climber who has taught at school of the Tetons. He and Amy descended to the nest box, making their way down through poison ivy and fighting thick clumps of honeysuckle. The kennel was not able to make it through the underbrush, so Amy ascended, helped Dave band, descended, and help Mark return the young falcons! He had a great time and is looking forward to doing more work with us in the future.

Year falcons first nested: 2001 | Total number of your produced (2016): 35 | Total sites in complex: 4

Bunge North America, McGregor IA

Seasonal data

Adult Female: *U/*R Bubbles, a 2009 hatch from the 3M watertower in Cottage Grove, MN Adult Male: Unknown Unknown number of eggs laid, three eggs hatched Hatch began: 4/28/16 (estimated) Banding date: 5/20/16

•	1947-20057	03/P	Female	Maggie
•	1156-14931	E/39	Male	Tayler
•	1156-14932	E/40	Male	Tempest

Last year, the falcons were too old to band, so we moved the site a little earlier. Taylor Aaland accompanied John and Amy to the top of the stackhouse, where we squirmed through a narrow manway to find three nice little falcons around 21 days old – the perfect age for banding! This site uses one of Jonathan Howe's flip-top boxes, which makes it very easy to band. Thanks to Taylor, Brett Kagay, and Bunge America for their support. Based on the contents of the nest



box, Bunge's falcons are doing their best to keep the plant's pigeon population down!

Year falcons first nested: 2010 | Total number of young produced (2016): 18

Bellevue State Park, Bellevue IA

Seasonal Data

Both adults are unbanded Unknown number of eggs laid, 3 eggs hatched. Hatch began: 5/10/16 (estimated) Banding date: 6/01/16

•	1947-35584	47/P	Female	Striker
•	1947-35585	48/P	Female	Bolton
•	1156-14977	K/26	Male	Bonar

Bellevue is one of two new sites this year! Bob, Dave, and Amy installed a nest box on a cliff inside Bellevue Park in the fall of 2013. It attracted falcons in 2014 and 2015, but was non-productive until this spring. Sally Bolton alerted us to falcons and, based on her observations and the weather, we decided to band on June 1st. While Amy and John banded at King and Prairie Island, Dave got to handle Bellevue all on his own! He rappelled down and banded the falcons with the help of park staff. Bonar is named after park manager Matt Bonar, who has been very supportive of our work, and Bolton is named after Sally Bolton, who watches this site and several others.

The photo below was taken by Sally and shows fledgling Bolton taking a little time to scratch.

Year falcons first nested: 2016 | Total number of falcons produced (2016): 3



Illinois

411 Hamilton Building, Peoria IL

Seasonal Data Female: unbanded Male: unknown Unknown number of eggs laid, three hatched Hatch began: 5/12/16 (estimated) Banding date: 6/04/16

• 1156-14967 K/18 Male	David
------------------------	-------

- 1156-14968 K/19 Male Jimbo
- 1156-14969 K/20 Male Sue

Bob and Board member Jim Robison installed a nest on the 411 back in 2004. Unfortunately, the local falcons took to a bridge instead, where fledglings tended to end up falling into the water at some point and drowning. Jim was absolutely thrilled to report that falcons had finally adopted the box this spring! While Peoria is a little out of our normal stomping grounds, we knew we had to make the trip!

Jim is also an experienced falconer and falcon breeder, so we were able to add him to our banding permits. Amy ran down to Peoria to band the falcons with Jim and his son David. It was great to see everyone's enthusiasm for the falcons! Many thanks to Jim, David, and building manager Susie Armstrong for their help and support. Bob would be most pleased – and very impressed with David!

The Peoria Journal-Star has a great story about the falcons here: <u>http://bit.ly/28JKFyg</u>

Year falcons first nested: 2016 | Total number of young produced (2016): 3



Left to right: Amy, Jim, David

Productive Unbanded Sites

The following sites were productive, but falcons weren't banded. We have included a count where we have one.

West Bluff, Maiden Rock MN

Landowners Dan and Sheila reported eyasses on site, but we were unable to band them and I don't have a production count. The falcons used the Ogren eyrie, which is difficult to reach and hard to observe.

Total sites in complex: 2

Aggie's Bluff, Lansing IA

We spotted three eyasses here, but are unable to reach the eyrie to band them. Falcons first nested here in 2012 and have produced at least 16 young to date (2016).

Shellhorn Complex: Brownsville MN

The falcons chose a new eyrie on the primary Shellhorn bluff located behind the Shellhorn Bar. Dave Kester rappelled down the cliff, but large loose boulders directly above the eyrie made it too unsafe to band. Dave believes there were at least three eyasses based on loud vocalizations and whitewash on the cliff directly below the eyrie. Falcons first nested here in 2008 and have produced at least 7 young to date (2016).

Total sites in complex: 3

Lynxville Complex: Monehen Bluff, Lynxville WI

The falcons were too old to band by the time we got to this site on June 13th. Dave Kester spotted two eyass falcons, but one was struck by a car and killed shortly after fledging. We will band this site earlier next year. Falcons first nested here in 2003 and have produced at least 20 young to date (2016).

In addition to peregrine falcons, volunteers Maggie Jones, Ken Lange, Mark Blackbourne, and Bill Smith reported great horned owls and vultures nesting in the Lynxville complex. The GHO and falcon nests were located about 3.4 miles from one another.

Total sites in complex: 4

Unproductive Sites

05/20/16: Wyalusing Quarry, Wyalusing WI

Dave Noble and Gary Eldred reported an adult male and immature female b/r A/47 copulating here on April 6th. But when Dave Kester rappelled down to the nest box on May 20th, there were no eggs or shell fragments, and no attempts at a scrape. This is the sixth year that Wyalusing has attracted an adult+immature pair. We are all perplexed by the site's seeming inability to attract two sexually mature adults, even after a nest box built by the Wisconsin Falconers Association was installed in the fall of 2014.

No falcons were spotted on May 20th.

05/24/16: Greshik's Bluff, Fountain City WI

Although falcons were reported by Amy Ries and Doug Wood this spring, their presence seemed somewhat tentative and they were always hard to find. When Amy Ries rappelled down to the nest box on May 24th, there were no eggs, shell fragments, or scrape. The scant prey remains in the box were very weathered and free of any flesh, indicating they had been sitting there for a while. A male falcon weakly defended the bluff before flying away. No female was spotted or heard.

Although we installed a nestbox here in 2007, this cliff has a very poor record of production. It has produced just three falcons since 2008. We are thinking about installing a trail cam.

06/16/16: Waukon Complex: Leo's Bluff, Waukon Junction IA

For the second year in a row, Dave Kester rappelled down to the eyrie, where he found what he described as a 'crime scene' – two dead roughly 26-day old falcons with their heads torn off, cached like prey on a ledge above the eyrie. The bodies were fresh, with no decomposition evident, although rigor had set in. Joyce Caley, a local volunteer, reported that the adults stayed on site over the summer, although they moved from the eyrie cliff to one further downstream. We speculate that the young may have been killed by Great Horned owls given the circumstances. Caley has heard owls in the area and will be listening more intently next year.

Like Greshik's Bluff, Waukon has a very poor record of production. The whole complex has produced just seven falcons since 2007. We think owls could be a persistent problem and are also thinking about a trail cam here.

Total sites in complex: 3

06/13/16: Glen Haven Cliff, Glen Haven WI

Bill Smith and Brett Mandernack reported a food transfer between an adult male and an immature female on May 26th. Both Amy Ries and Dave Kester rappelled down the cliff, but no falcons were seen or heard, and neither Amy nor Dave found any sign of an attempt to nest.

Maiden Rock, Maiden Rock WI

Amy Ries reported two falcons copulating at Maiden Rock on March 7th. Dean Edlin and Nicholas Schroeder of the WI DNR reported falcons in April. Unfortunately, the falcons disappeared sometime in May and the site was unproductive. We did not rappel down to check the cliff.

Total sites in complex: 5

Great River Energy, Elk River, MN

The female here laid four eggs, but only one of them hatched. The hatchling was accidentally swept out of the nest box by mother Mary Ellen.

Falcon Sightings

Falcons were spotted at these sites, but there were no nesting attempts that we are aware of.

- Bill Smith located an excellent potential eyrie at the mouth of the Platte River near Potosi, WI. When he and Ries visited on July 13th, they saw a pair of adults perched on a cliff near two good potential eyrie locations. Maggie Jones identified this spot years ago, and it looks like it might finally go online! A huge thanks to Bill Smith, Maggie Jones, Jane Furchgott, and Ken Lange for watching this site, especially since it can only be seen from the river.
- Rich King reported falcons on his cliff near Victory, WI. We have had them reported during the fall in other years, but never in the spring. We are very excited to add Victory Bluff to our watch list!

Bald Eagles

Decorah Bald Eagles

The Decorah laid three eggs this year, but only two hatched – a first for this eagle couple! D24 and D25 both fledged successfully. We trapped them and attached transmitters to them in July. D25 was struck and killed by a vehicle in late September, but D24 is still going strong as of this writing. We installed new cameras in September and recovered the unhatched egg for testing.

Thanks to the millions of fans around the world who joined us for eagle watching this year! We hope you like the new cameras and hope to have even more learning and interaction tools available for everyone in 2017.

- Egg #1: 2/18/16 @ 8:28 PM
- Egg #2: 2/21/16 @ 7:46 PM
- Egg #3: 2/25/16 @ 6:59 PM

- D24 Hatch: 03/29/16.
- D25 Hatch: 03/31/16, 3:15PM CDT
- D24 Fledge: 6/11/16. D24 was 74 days old at fledge.
- D25 Fledge: 6/17/16 @ 4:26pm. D25 was 78 days old at fledge.



Nest N2B, 2016: D25 front, D24 back

Decorah North Bald Eagles

Our first year of watching Decorah North was a difficult one. The eagles laid three eggs and produced three eaglets: DNN1, DNN2, and DNN3. DNN3 died on May 11th from a combination of sibling aggression, which restricted food access, and a lack of brooding in cold, wet weather. DNN2 died of methomyl poisoning on May 25th (more about that here: <u>http://bit.ly/2fVQN9a</u>). DNN1 was the lone survivor. It fledged on July 9 and was frequently seen in the area. Interestingly enough, one of the Decorah eagles visited this nest on August 7th! Video here: <u>https://youtu.be/ZLX09hVLxPc</u>



Decorah North Nest: Left to right: DN2, DN3, DN1

Xcel Energy Fort St. Vrain Bald Eagles

The Fort St. Vrain bald eagle nest failed on Aril 16th. Although both parents tried to brood them, all three eaglets died following a heavy, wet storm. We hope next year will yield a more positive outcome, although life at this nest has often been challenging given April's weather.

We installed a new HD camera here in late September and have been enjoying the sight of both adults working on the nest. One of interesting things about multiple cameras is the ability to compare different eagle pairs, soft materials, the timing of events, and behaviors. That cam can be watched on our website at https://www.raptorresource.org/birdcams/xcel-energy-cams/ or at Xcel's site at https://birdcam.xcelenergy.com/cams/eagle_top.

Get in Touch!

Want to learn more about us and/or get in touch?

Our address

Raptor Resource Project 119 Winnebago Street PO Box 16 Decorah, IA 52101

Our phone

276-FALCON2 (276-325-2662)

Our website

www.raptorresource.org

Non-profit ratings

Guidestar https://www.guidestar.org/profile/41-1693761 Great Non-Profits http://greatnonprofits.org/org/raptor-resource-project

Our email address

amy@raptorresource.org