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Banding Together to Learn & Preserve

25 Years of Goose Banding at Old Chevak, Alaska

In Memory of local Chevak banders no longer with us.

Prepared in cooperation with the U.S. Geological Survey, Village of Chevak, and the U.S. Fish and Wildlife Service.

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The youth of Chevak, Alaska, worked at Old Chevak Goose Camp with researchers from the U.S. Geological Survey and U.S. Fish and Wildlife Service to capture and band geese and swans along the *Qissunaq* (Kashunuk) River from 1986 through 2010.

These geese and swans are descendents of birds that from time immemorial returned each spring and kept Cup'ik ancestors from dying of starvation. The People stayed strong in numbers. In recent times when fewer and fewer birds filled the sky, today's Cup'ik knew it was their turn to help the birds that had helped their ancestors.

This book celebrates the youth of Chevak, Alaska. Their willingness to help monitor their local resources has been the cornerstone of this cooperative banding program for 25 years.

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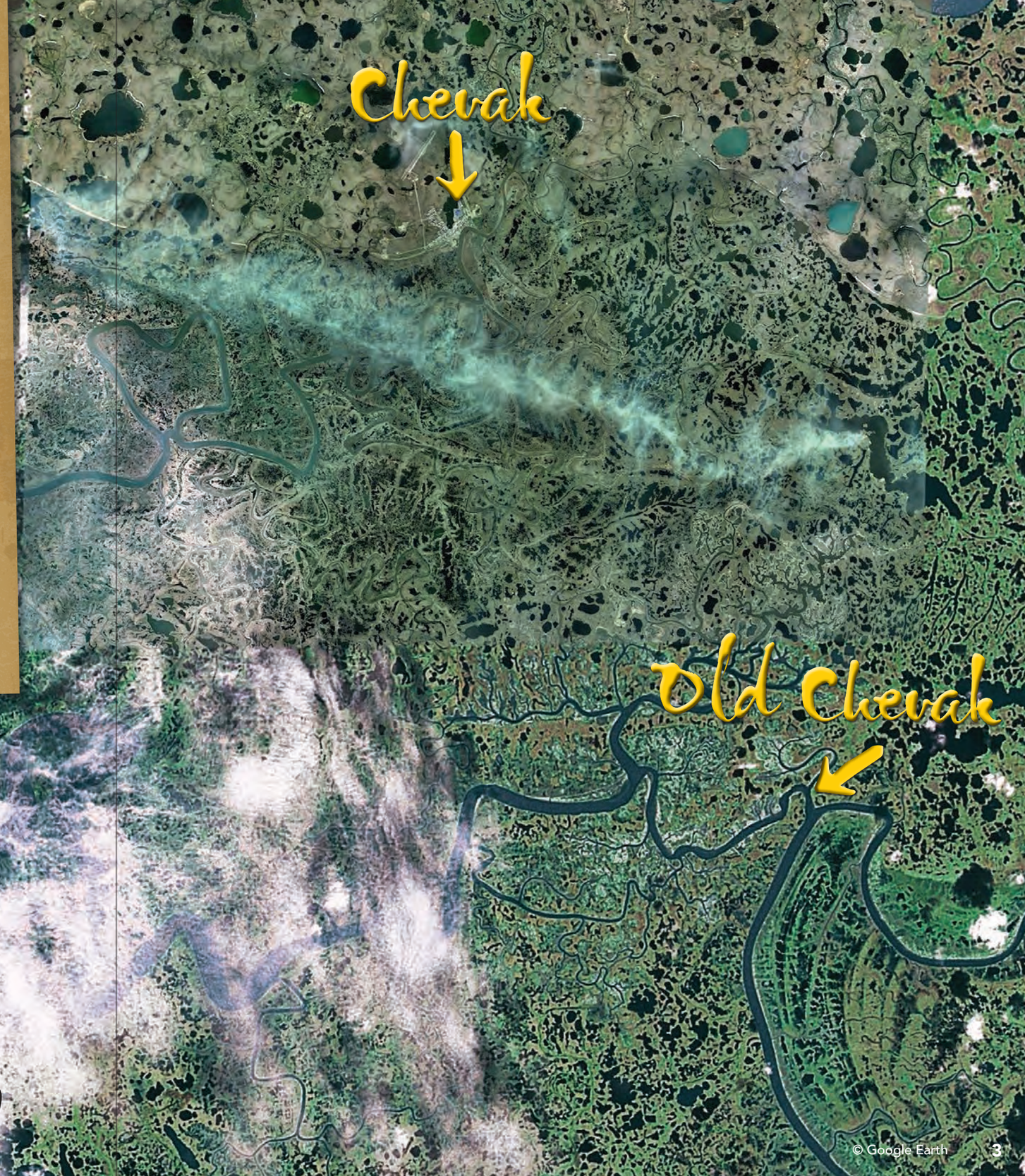


What We Did

Dora Hill

Signing up at the Wagne Hill Store

During the 25 years from 1986 through 2010, Chevak youth signed up to work on banding crews for up to a week each August.

Future banders

We left home and traveled 30 miles by boat to our ancestral village of Old Chevak above the banks of the Keoklevik and Kashunuk rivers.

Say goodbye to Chevak

A fun ride to Old Chevak!

Photo: Tami Heilemann (DOI)

What We Did

In fog or sun, wind or mosquitoes – we banded geese and swans.

"This is fun!" Mary Bukowski, 1994

We worked hard. And we played hard too.

Attitude is everything

Why We Care

Historical Perspective

Since time immemorial, ancestors of the Cup'ik and Yup'ik could live on the coastal delta of the Yukon and Kuskokwim rivers because birds, seals, and fish live here in great abundance.

If the People followed certain rituals, these creatures respected us and freely presented themselves to be taken and eaten.

When long, hard winters emptied the People's food caches too early, starvation loomed. Return of geese in April (*Tengmiirvik* - time the geese arrive) helped to save us.

Qissunamiut or *Kashunamuit* (People of the Kashunuk River) historically used spears, throwing sticks, bolos or bows and arrows to hunt geese in spring. Eggs and meat went into food caches.

"If it wasn't for the geese, you and I would not be here today because our ancestors would have not made it."

—Chuck Hunt, born and raised on the Y-K Delta

1870s

Here's a description from long ago:

Qissunamiut "make drives of waterfowl on the marshes during August, when the old birds have molted their wing-feathers and the young are still unable to fly.

"Salmon nets are arranged by means of stout braces and stakes to form a pound with wings on one side. The people form a long line across the marsh and, by shouting and striking the ground with sticks as they advance, drive the birds before them toward the pound.

"As they approach [the trap], the line of people converge until they reach the wings, and the birds, thus enclosed, are driven in and killed with sticks."

— observations of Edward William Nelson, Smithsonian Institute published in his book, The Eskimo About Bering Strait

Above: Goose hunting camp on the Yukon Delta
Right: Nets, snares and traps
Below: Hunter casting a spear

All photos from The Eskimo About Bering Strait by Edward W. Nelson
Courtesy of the National Anthropological Archives, Smithsonian Institution.

Why We Care

Modern Perspective

What is happening to the geese?

Seeing fewer and fewer geese return here to nest worried residents of Y-K Delta, *Nunam Kitlutsi*, and the Association of Village Council Presidents. They had many meetings and discussions with the U.S. Fish and Wildlife Service, the Alaska Department of Fish and Game, and private conservation groups. California, the main state where arctic geese were hunted in winter, also sent representatives.

Hooper Bay Agreement / Yukon Delta Goose Management Plan

In November of 1984, the Association of Village Council Presidents reached consensus and passed the Hooper Bay Agreement, soon to be called the Yukon Delta Goose Management Plan, to conserve populations of the geese that nest here. Everyone from Alaska to California pitched in to help by limiting or stopping hunting and egg gathering.

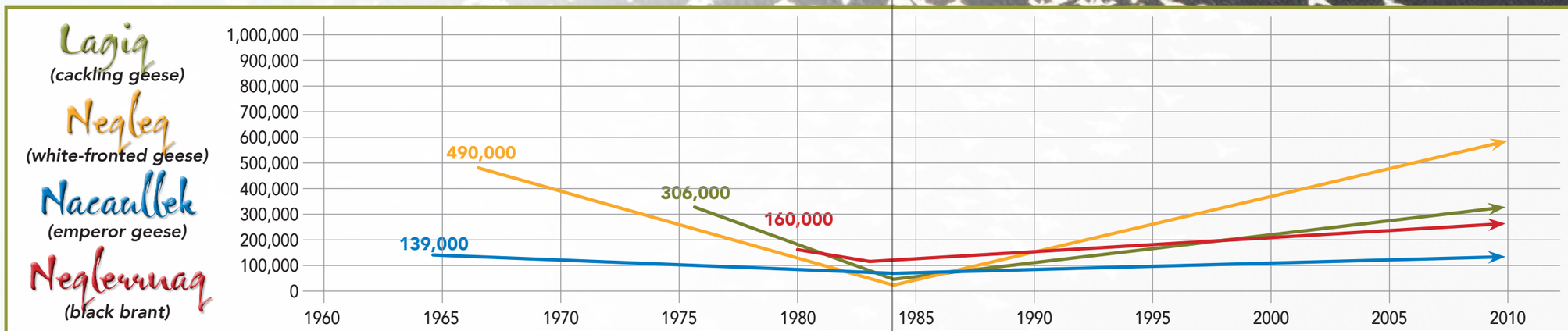
Traditional use

Cooperation not only led to rising numbers of geese, but also to the long-awaited amendment to the original 1916 Migratory Bird Treaty Act. Now the Act officially includes a lengthened subsistence hunting time that reflects traditional use.

Working together

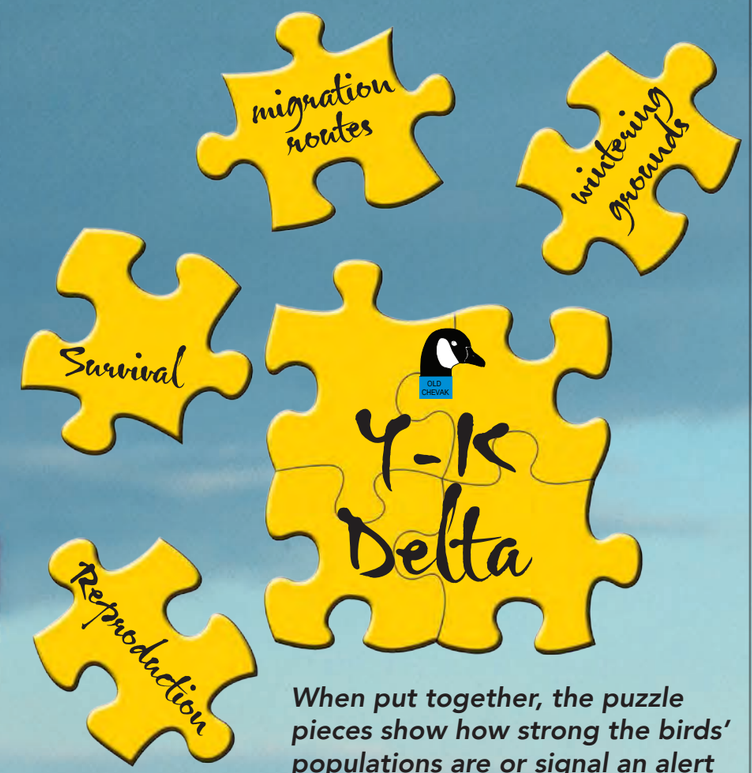
From that 1995 amendment arose the Alaska Migratory Bird Co-Management Council in 2002. Representatives from Alaska's nonprofit tribal organizations work with representatives from the wildlife agencies to set subsistence hunting rules that benefit both the hunters and the birds.

When fewer geese returned to the Delta in the 1970s and 1980s, Chuck Hunt and other elders said, ***"It's our turn to pay back respect to birds that have population problems. It is our turn to save the birds that saved our ancestors from near disaster."***



Due to the unique efforts of people throughout the Pacific flyway, all birds have shown recovery since 1984.

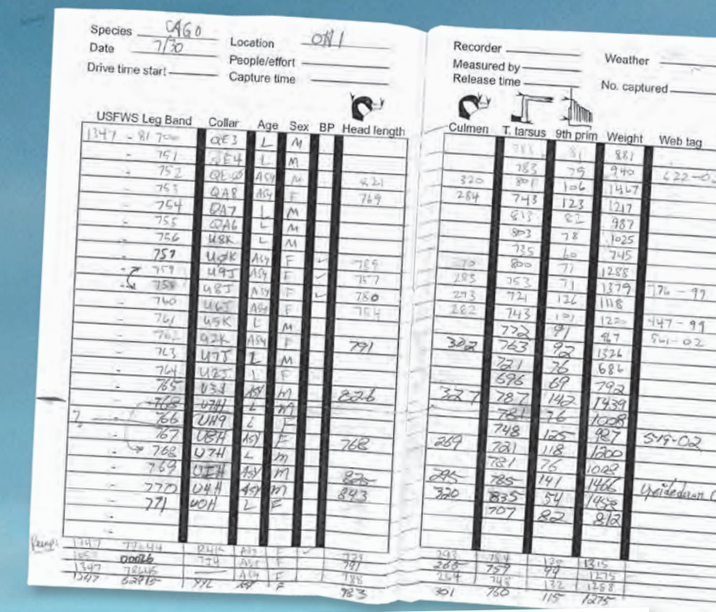
Why We Band Geese



When put together, the puzzle pieces show how strong the birds' populations are or signal an alert if problems are starting.

Bands – a way of story telling

Banding – especially on the Y-K Delta – helps to fill in all parts of the puzzle. It's here on the Delta where the birds are flightless and more easily captured. We can band family groups, record the year a bird is hatched, and know by body weight if a bird is healthy. That way, researchers along migration routes and on wintering grounds can hear the story of each bird as they read band numbers.



Chevak banding crews record birds' stories

Information gathered from the banded birds has helped to document changes in their distribution and survival and how climate change is affecting these geese and swans.

"We weigh, measure, and band the geese and swans to learn how we can help their populations rebound to the higher levels known by Chevak ancestors."

—Craig Ely, *Old Chevak Goose Camp leader*

Photo: Tami Heilemann (DOI)

Where We Band Geese

We band geese in places where our ancestors and elders used to roundup flightless geese – around the old village and summer camps of *Cev'allraq* (Old Chevak).

This part of the vast delta lowlands (*maraq*) between the Yukon River to the north and the Kuskokwim River to the south is filled with thousands of lakes, marshes, and sloughs. Storm tides on the nearby Bering Sea can flood the low tundra with ice in winter and saltwater in other seasons.

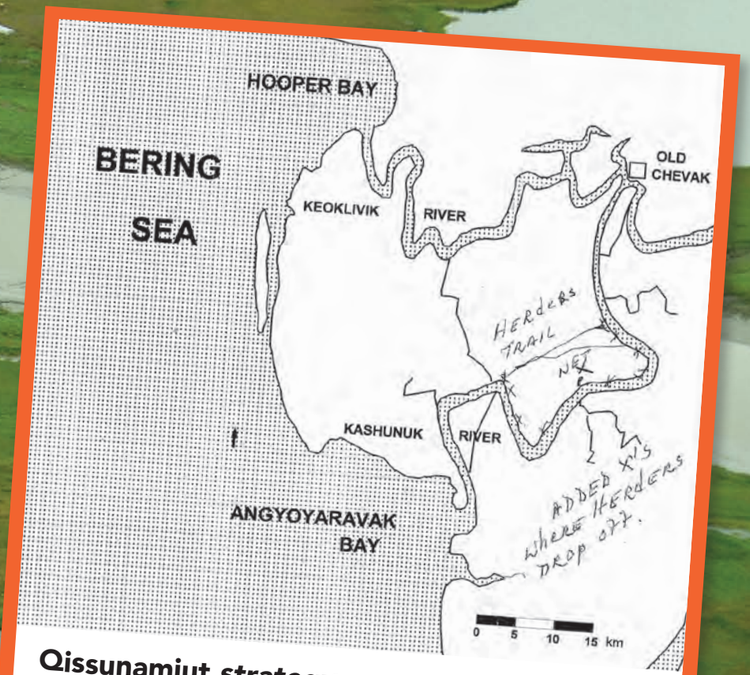
Photo: Tami Heilemann (DOI)

Photo: Tami Heilemann (DOI)

Craig Ely with Leo Moses at Old Chevak

"Old Chevak is still a special place for Qissunamiut."

— Leo Moses



Qissunamiut *strategy*

Leo Moses shows one of the places where *Qissunamiut* used to set a net trap and drop herders for the roundup. They knew a good strategy. Now we use that same site and strategy when we roundup geese for banding. It's usually the location of our largest research bird drive.

The story of Cev'allraq (Old Chevak)

The story of Old Chevak tells of flooding and the need to move to drier locations. The story starts in *Qissunaq* (Kashunuk) not far to the south, once one of the oldest and largest villages on the Y-K Delta. Periodic floods in the 1930s and earlier scattered *Qissunamiut* to their outlying camps. But they always returned.

As told by John Pingayaq – after the great flood of December 1945 surrounded *Qissunamiut* homes with ice blocks and water right up to the entrances, reluctantly the people decided it was time to move to Old Chevak where a trading post store had opened.

But flooding occurred at Old Chevak too. So within a few years, the *Qissunamiut* moved again, this time to higher ground at *Cev'aq* (Chevak) where we live today. Seven miles as the raven flies, but much longer by boat. The store, a school, and a new church came too. Leo Moses remembers how excited he was in 1950 to move from Old Chevak to modern Chevak.

The old church left at Old Chevak after the move was sold to the Bureau of Sport Fisheries and Wildlife (U.S. Fish and Wildlife Service) and used as a bird banding station.

Who Bands Birds?

25 years of Banding Crews

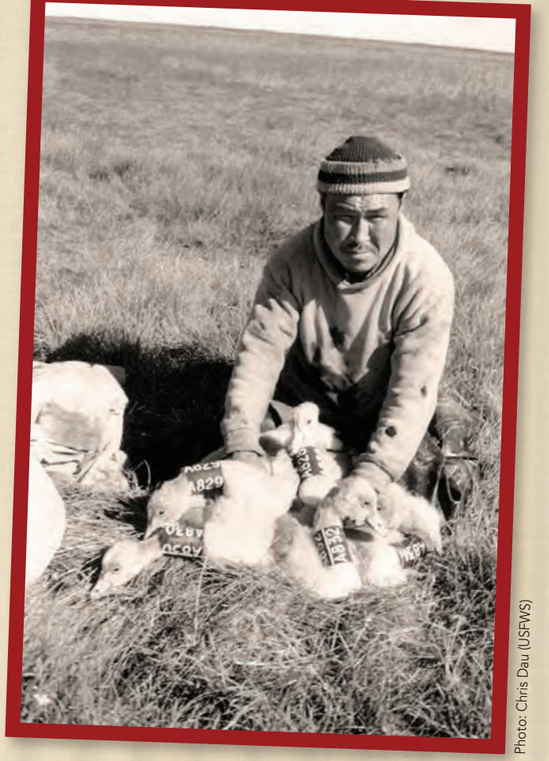


Photo: Chris Dau (USFWS)

People of Chevak have helped researchers at Old Chevak for about 60 years. Here's an old photo of our Jack Paniyak with banded cygnets. He, Matthew Peterson, and others helped roundup thousands of ducks and geese.

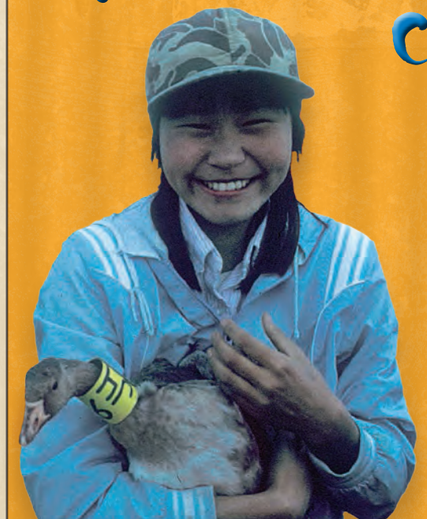
Now turn the pages to see all the youth from Chevak who went to Old Chevak Goose Camp to help researchers from U.S. Geological Survey, led by Craig Ely, for the last 25 years.

Photo: Tami Heilemann (DOI)

1986

1. Leo Cholok; 2. Maryann Francis; 3. Theodore "Teddy" Atcherian; 4. Fred Ulroan; 5. Xavier "Mick" Nash; 6. Don Youkie (biologist); 7. Xavier Paniyak; 8. Herman Paniyak; 9. Xavier Cholok; 10. Tom Pogson (biologist); 11. Leo Unin

1st Year in Chevak!



1987 Way to go!

1. Craig Ely (biologist); 2. Mary Rita Ely (volunteer); 3. Maryann Francis; 4. Xavier "X" Slats; 5. Fred Ulroan; 6. Andrew "Junior" Ayuluk; 7. Xavier "Mick" Nash; 8. Robert Paniyak; 9. Xavier Paniyak; 10. Leo Unin; 11. Chris Babcock (biologist); 12. Jack Depperschmidt (biologist); 13. Dave Budeau (biologist)

Muscle Crew! 1988

1. Elizabeth "Lisa" Howarth; 2. Gary Chaylkun; 3. Herman Paniyak; 4. Maryann Francis; 5. Xavier Paniyak; 6. Robert Paniyak; 7. James Fermoyle; 8. Theodore "Teddy" Atcherian; 9. Fred Ulroan; 10. Xavier "Mick" Nash; 11. Leo Unin; 12. Leo Cholok; 13. Andrew "Junior" Ayuluk, Jr.

1989

1. Contessa Chayalkun; 2. Elizabeth "Lisa" Howarth; 3. Jay Bell; 4. Janice Paniyak; 5. Darlene Paniyak; 6. Leo Cholok; 7. William "Blue" Vaudrin; 8. Arnold Lake; 9. Robert "Bobby" Paniyak; 10. James Fermoyle; 11. Robert "Rock" Paniyak; 12. James Nash

Testing our wings!

1990

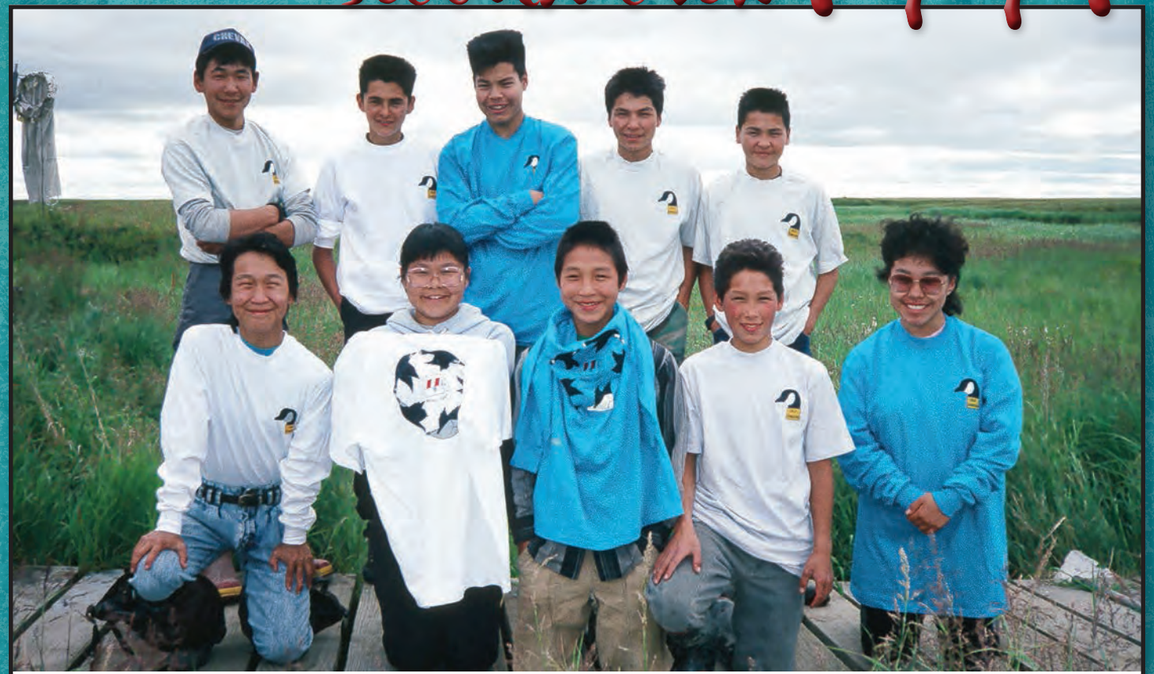
1. Don Slats; 2. Robert Paniyak; 3. Eric Ayuluk; 4. Andrew Ayuluk, Jr.; 5. Xavier Cholok; 6. Gary Chayalkun; 7. Sonia Chayalkun; 8. Ada Fowler (biologist); 9. Michelle Atcherian; 10. Laranell Johnston; 11. Paul Slats; 12. Chris Nayamin; 13. Craig Ely (biologist); 14. Elizabeth "Lisa" Howarth; 15. Johanna Boyscout; 16. Clinton Slats; 17. Darlene Paniyak; 18. Marvin Atcherian; 19. Chris Babcock (biologist); 20. Maryann Murdock; 21. Tom Pogson (biologist)

Blythe Anderson has the boys' attention

1991 first crew

1. Nadia Chayalkun; 2. Peter Friday; 3. Paul Slats; 4. Chris Friday; 5. Gary Chayalkun; 6. Floyd Uroan; 7. Sonia Chayalkun; 8. Johanna Boyscout; 9. Leonard Ayuluk; 10. Jaime Fermoyle; 11. Fred Ulroan; 12. John Moses

second crew 1991



1. Daniel Agarayak; 2.Michelle Atcherian; 3. Erik Ayuluk; 4. Lance Fermoyle; 5. Contessa Chayalkun; 6. James Nash; 7. Chance Hill; 8. William "Blue" Vaudrin; 9. Jeff Bukowski; 10. Apa Bukowski

Don't band me!

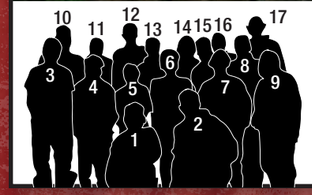
1992

1. Nadia Chayalkun; 2. Orrin Aloralrea; 3. Bobby Paniyak; 4. Sonia Chayalkun; 5. Michael Jones; 6. Michelle Atcherian; 7. Mary Bukowski; 8. Paul Slats; 9. Lance Fermoyle; 10. Adolph Bukowski; 11. Herman Paniyak; 12. John Moses; 13. Clinton Slats

the many faces of goose banders!

Bon voyage!

1993



1. Bruce Paniyak; 2. Craig Ely (biologist); 3. Alfonzo Cano; 4. Nadia Chayalkun; 5. Twila Chayalkun; 6. Amy Peter; 7. Sonia Chayalkun; 8. John R. Moses; 9. Michelle Atcherian; 10. Dominic Malenfont (biologist); 11. Mary Bukowski; 12. Mike Babcock (biologist); 13. Ada Fowler (biologist); 14. Orrin Aloralrea; 15. Brian Pearson (biologist); 16. Paul Slats; 17. Chris Babcock (biologist)

Water ski, Alaska-style!

(only biologists allowed to ski)

1994 first crew

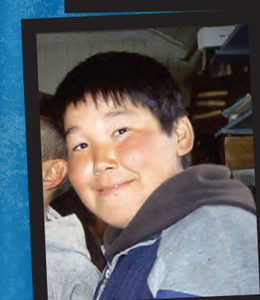
1. Nadia Chayalkun; 2. Donna Boyscout; 3. J.R. Moses; 4. Mary Bukowksi; 5. Kevin Slats; 6. Micah Kanrilak; 7. Paul Slats; 8. Alvina Peter; 9. Nora Boyscout; 10. Violet Paniyak; 11. Glenda Bukowski; 12. Sonia Chayalkun; 13. Orrin Aloralrea; 14. Albert Ulroan

second crew 1994

1. Tyrel Aloralrea; 2. Brandon Nayamin; 3. David Ulroan; 4. Warren Hill; 5. Arlen Tuluk; 6. Ryan Bukowski; 7. Christopher Nayamin; 8. Darrel Atcherian; 9. Neil Bukowski; 10. Lee Joe; 11. Harlan Hill; 12. Chester Bukowski; 13. Christopher Matchian; 14. Michael Boyscout

Work hard!

Play hard!



1995 first crew

1. Craig Ely (biologist); 2. Paul Boyscout; 3. Ada Fowler (biologist); 4. Mary Bukowski; 5. Neil Bukowski; 6. Lance Fermoyle; 7. Sonia Chayalkun; 8. Albert Ulroan; 9. Glenda Bukowski; 10. Colleen Fermoyle; 11. Warren Hill; 12. Rosalene Paniyak; 13. Howie Howarth (biologist); 14. Bruce Paniyak; 15. Andrea Jones; 16. Samantha Berry (biologist); 17. Jeff Pelayo (biologist); 18. Michael Boyscout; 19. David Black (biologist)

The captors and their quarry!

Hello goose!

second crew 1995

1. Ada Fowler (biologist); 2. Ryan Bukowski; 3. Jonathan Nash; 4. Darrel Atcherian; 5. Paul Slats; 6. Lee Joe; 7. Leroy Moses; 8. Eric Hill; 9. Craig Ely (biologist); 10. Twila Chayalkun; 11. Brandon Nayamin; 12. Tommy Umagak; 13. Ulrich Ulroan; 14. Violet Paniyak; 15. Connie Agimuk

Up and away!

1996

1. Bruce Paniyak; 2. Mary Bukowski; 3. Ada Fowler (biologist); 4. Warren Hill;
5. Eric Hill; 6. Craig Ely (biologist); 7. Chester Bukowski; 8. Andrea Jones;
9. Glenda Bukowski; 10. Lance Fermoyle; 11. Rosalene Paniyak;
12. Thomas DeMaria (biologist); 13. Neil Bukowski; 14. Matt Brice (biologist);
15. Violet Paniyak; 16. Kathy Steger (biologist); 17. Lynn Creekmore (biologist)

1997

1. "Skye" Michael Chayalkun; 2. Bruce Paniyak; 3.Derek Night; 4. Chester Bukowski;
5. Kane Tangiegak; 6. Adam Hill; 7. Ada Fowler (biologist); 8. Violet Paniyak;
9. Craig Ely (biologist); 10. Colleen Fermoyle; 11. Glenda Bukowski;
Eric Hill (not shown) also participated

Working and playing at the same time

1998 first crew

1. Marsha Nanok; 2. Jeremy Tuluk; 3. Mary Bukowski; 4. Derek Night; 5. Jerilyn Ulroan; 6. Eric Hill; 7. Dawn Nayamin; 8. Warren Hill; 9. Paul Nanok; 10. Adam Hill; 11. Amy Lapp; 12. Colleen Fermoyle; 13. Brywon Kanrilak; 14. Kennek Nanok; 15. Isaac Atchak; 16. Jon Atchak

Take Flight!

Run, goose, run!

second crew 1998

1. T.J. Jones; 2. Bev Short (biologist); 3. Warren Hill; 4. Crystal Atcherian; 5. Tommy Umugak; 6. Dustin Slats; 7. Kane Tangiegak; 8. Randy Nayamin; 9. Chris Matchian; 10. Paula Matchian; 11. James Miles; 12. Ken Kriese (biologist); 13. Stephanie Slats; 14. Cherish Chayalkun; 15. Matthew Cholok; 16. Ellie Mather (biologist); 17. Arlen Tuluk; 18. Julie Morse (biologist); 19. Craig Ely (biologist); 20. Eric Sekinger (biologist); 21. Eunice Francis; 22. Ted Minimoto (biologist); 23. Joel Schmutz (biologist)

clear as mud!

1999 first crew

1. Scott Ulroan; 2. Tiffany Tangiegak; 3. Kane Tangiegak; 4. Patrick Tuluk; 5. Chris Matchian; 6. Paula Matchian; 7. Angela Seton; 8. Warren Hill; 9. Rhonda Hill; 10. Jerilyn Ulroan; 11. Eunice Francis; 12. Crystal Atcherian; 13. Kenneth Nanok; 14. Francis Nanok; 15. James Miles; 16. Amy Lapp; 17. Arlen Tuluk; 18. Cherish Chayalkun; 19. Angela Seton; 20. Dawn Nayamin; 21. Stella Chayalkun; 22. Dustin Slats; 23. Morgan Martins; 24. Alice Matchian; 25. John Nanok

second crew 1999

1. Billy Nash; 2. Eric Hill; 3. Isaac Atchak; 4. Adam Hill; 5. Leon Ulroan; 6. Crystal Tuluk; 7. Chris Matchian; 8. Kyle Boyscout; 9. Larry Noratak; 10. Terence Tall; 11. Stella Atcherian; 12. Thadius Nayamin; 13. Dennis Slats; 14. Randy Nayamin; 15. Jon Atchak; 16. Jacob Blakesly

Reflections of a goose bander

1999 third crew

1. Rhonda Hill; 2. Angela Seton; 3. Paula Matchian; 4. Trisha Gorby (biologist); 5. Stella Chayalkun; 6. Warren Hill; 7. Dustin Slats; 8. J.J. Miles; 9. Bev Short (biologist); 10. Chantelle Carroll (biologist); 11. Joel Schmutz (biologist); 12. Janet Beagley (biologist); 13. Christopher Matchian; 14. Craig Ely (biologist)

We're tracking you!

Photo: Melissa Bicking

2000

1. Chester Bukowski; 2. Chris Babcock (biologist); 3. Darrell Atcherian; 4. Kyle Boyscout; 5. Adam Hill; 6. Jeremy Tuluk; 7. Ada Fowler (biologist); 8. Jeremiah Ayuluk; 9. Thurl Matchian; 10. Patrick Tuluk; 11. Todd Rinaldi (biologist); 12. Craig Ely (biologist); 13. Scott Ulroan; 14. Isaac Atchak; 15. Paul Boyscout; 16. Jewell Mackenzie (biologist); 17. Melissa Bicking (biologist); 18. Jody Seitz (reporter)

Catch goose, will band!

2001 first crew

1. Tess Ely (volunteer); 2. Kyle Boyscout; 3. Crystal Slats; 4. Adam Hill;
5. Rhonda Hill; 6. Bavilla Ayuluk; 7. Jareth Boyscout; 8. John Terenzi (biologist);
9. Ryan Kreiner (biologist); 10. Brigitte McBride (biologist); 11. Craig Ely (biologist);
12. Juliet Liu (biologist); 13. John Atchak; 14. Nick Myatt (biologist);
15. Amy Leist (biologist); 16. David Safine (biologist)

second crew 2001

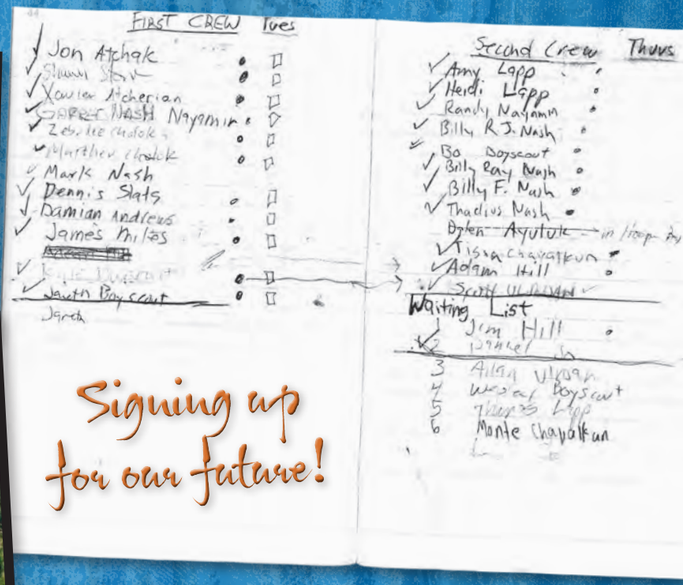
1. Lance Martins; 2. Ryan Kreiner (biologist); 3. Dennis Slats; 4. Juliet Liu (biologist);
5. Ruth Ayuluk; 6. Jonathan Chayalkun; 7. Terence Tall; 8. Scott Ulroan;
9. Tess Ely (volunteer); 10. Monte Chayalkun; 11. John Terenzi (biologist);
12. Craig Ely (biologist); 13. Brigitte McBride (biologist); 14. Amy Leist (biologist)

Fish for supper!

2002 first crew

1. Damian Andrews; 2. Jon Atchak; 3. Xavier Atcherian; 4. James Miles; 5. Shawn Stone; 6. Matthew Cholok; 7. Jareth Boyscout; 8. Kyle Boyscout; 9. Joel Schmutz (biologist); 10. Bryce Lake (biologist); 11. Dennis Slats; 12. Mark Nash; 13. Garrett Nayamin; 14. Jonas Ely (volunteer); 15. Zebedee Cholok; 16. Charles Eldemire (biologist); 17. Erin Bohman (biologist); 18. Craig Ely (biologist); 19. Marin Sardy (biologist); 20. Heather Swenson (biologist); 21. Marnie Shepherd (biologist); 22. John Terenzi (biologist)

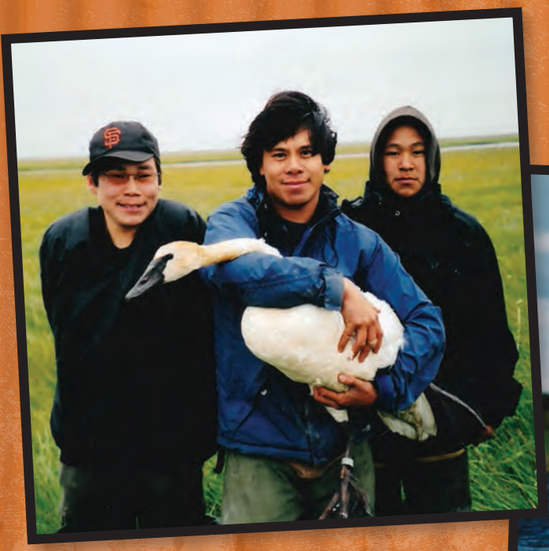
Just like our swift and strong ancestors!



Signing up for our future!

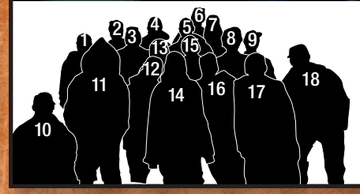
second crew 2002

1. Billy Ray Nash; 2. Heidi Lapp; 3. Amy Lapp; 4. Adam Hill; 5. Scott Ulroan; 6. Randy Nayamin; 7. Joel Schmutz (biologist); 8. Daniel Joe; 9. Billy R. J. Nash; 10. Bo Boyscout; 11. Craig Ely (biologist); 12. Jonas Ely (volunteer); 13. Billy R. Nash; 14. Jim Hill; 15. Heather Swenson (biologist); 16. Bryce Lake (biologist); 17. Thadius Nayamin; 18. Tisia Chayalkun; 19. Charles Eldermire (biologist); 20. Marnie Shepherd (biologist); 21. Erin Bohman (biologist); 22. John Terenzi (biologist)



Making it home through the mud was the hardest part!"

2003 first crew



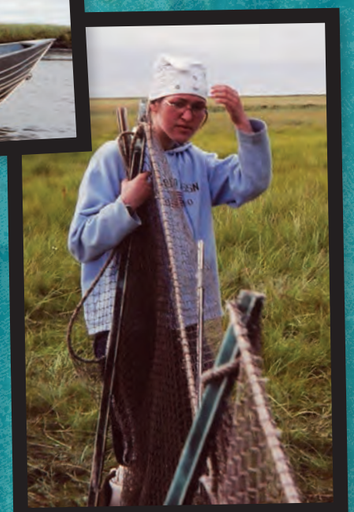
1. Charles Eldermire (biologist); 2. Joel Schmutz (biologist); 3. Christina Aloralrea; 4. Martha Miles; 5. Xavier Atcherian; 6. Xavier Boyscout; 7. Marnie Shepherd (biologist); 8. Jeff Pelayo (biologist); 9. John Terenzi (biologist); 10. Jerry Hupp (biologist); 11. Leo Ayuluk; 12. Jessica Ayuluk; 13. Garret Nayamin; 14. Tisha Chayalkun; 15. Shawna Noratak; 16. Dinah Bukowski; 17. Jerome Slats; 18. Craig Ely (biologist)

second crew 2003

1. Jim Hill; 2. Dalen Ayuluk; 3. Kirby Tangiegak; 4. Jareth Boyscout; 5. Alden Boyscout; 6. Patrick Tuluk; 7. John Terenzi (biologist); 8. Fred Ulroan; 9. Arthur Slats; 10. Rhonda Hill; 11. Darek Noratak; 12. April Tall; 13. Craig Ely (biologist); 14. Clarissa Tall; 15. Thomas Lapp; 16. Charles Eldermire (biologist); 17. Jeff Pelayo (biologist); 18. Jerry Hupp (biologist)

2004 first crew

1. Hillary Hill; 2. Heidi Lapp; 3. Xavier Atcherian; 4. Leo Ayuluk; 5. Clayton Friday; 6. Fred Ulroan; 7. Alvin Ulroan; 8. Emmanuel Warren; 9. Emmanuel Atchak; 10. Jim Hill; 11. Craig Ely (biologist); 12. Marnie Shepherd (biologist); 13. Bryce Lake (biologist); 14. Patricia Fontaine (biologist); 15. Joel Schmutz (biologist); 16. John Terenzi (biologist); 17. Dan Rizzolo (biologist)



Look at them go!

Maragami aquigug - playing in the mud!

second crew 2004

1. Matthew Ulroan; 2. Andrienne Peter; 3. Forest Ayagarak; 4. Harold Paniyak; 5. Rhonda Hill; 6. Casandra Slats; 7. Lee Joe; 8. Dan Rizzolo (biologist); 9. Dianna Brann (biologist); 10. Joel Schmutz (biologist); 11. Patrick Lemons (biologist); 12. Craig Ely (biologist); 13. Kristin Degroot (biologist); 14. Clarissa Tall; 15. Patricia Fontaine (biologist); 16. Cecelia Atchak; 17. Marnie Shepherd (biologist); 18. Scott Ulroan; 19. John Terenzi (biologist)