

Brianna Hauch (Beseler)

Email:hauchb@doyon.com

Education

Minnesota State University Mankato
Master of Science in Geography
Focusing on Soil Geomorphology

Mankato, MN
Graduation date: May 2022
GPA: 3.9/4.0

University of Wisconsin Oshkosh
Bachelor of Science
Majors: Environmental Studies & Geography
Global Scholar certificate
National Society of Leadership & Success

Oshkosh, WI
Graduation date: May 2020
GPA: 3.27/4.0
Geog Major GPA: 3.5 / 4.0
ES Major GPA: 3.3 / 4.0

Relevant Courses Taken:

- Landforms & Soils
- Conservation of Natural Resources
- Earth Transformed
- Soil Geomorphology
- Geography Field studies
- Environmental Sociology
- Weather & Climate
- Belize Ecosystem Study abroad
- GIS
- Jamaica Field studies
- Graduate Research & Writing
- Issues in Physical Geography
- Environmental Humanities
- AK CESCL (certified)
- Advanced Soils
- Environmental Policy
- Environmental Geology
- Environmental Science
- Map Reading Analysis
- Oceanography
- Natural Hazards
- Food, Agriculture & the Environment
- Human Geography
- Climatic Environments
- Philosophy of Geography
- Latin America
- Wilderness First AID (certified)
- Part 107 Drone Pilot (certified)

Research Experience & Projects

Alaska Soils Field Technician (NEON)- Crew Lead

Fairbanks AK, Toolik Research Field station, Healy AK, Delta Junction AK, Barrow (Utqiagvik)

- **Conducted research on a National Science Foundation-funded project**, contributing to scientific advancements.
- **Performed soil coring in permafrost environments**, gathering samples for analysis.
- **Collected and processed soil cores** for lab research on pH, microbial activity, soil moisture, and nitrogen transformation.
- **Assisted in the collection and identification** of beetles, ticks, plants, and moss for ecological studies.
- **Selected to travel to the Arctic Circle**, conducting soil core collection at the remote Toolik research site.

Master's Thesis and APP Work:

Soil Conservation History and Agricultural Practices in the U.S

Minnesota State University Mankato, May 2022

- Analyzed and highlighted current and past federal soil conservation programs.
- **Researched soil conservation practices**, including cover crops and alternative agriculture methods.
- **Reviewed and synthesized current literature** on soil conservation techniques.
- **Examined studies and reports on federal soil conservation programs** in US agriculture.

Quantifying sediment thickness and post-settlement sedimentation rates within playa wetlands utilizing ^{210}Pb -dating techniques

Minnesota State University Mankato, May 2022

- **Investigated human impacts on landscapes**, analyzing environmental changes over time.
- **Measured sediment accumulation and runoff rates** from agricultural activities.
- **Conducted studies on watersheds and playas** in Kansas to assess hydrological patterns.
- **Utilized GIS methods to delineate watersheds**, improving spatial analysis and mapping accuracy.
- **Performed particle size analysis**, contributing to soil composition and erosion studies.
- **Applied Pb-210 and C-14 dating techniques** to determine sediment age and deposition rates.
- **Researched and identified effective soil conservation techniques and programs** for sustainable land management in these environments.

Undergraduate Research:

Long-term Fire History from Bass Lake Northeastern Wisconsin,
University of Wisconsin- Oshkosh, 2019-2020

- **Conducted field research** at Bass Lake in Beaver, WI, analyzing sediment deposits.
- **Awarded a UW Oshkosh small research grant**, supporting independent study initiatives.
- **Collected lake sediment cores** from preidentified locations for environmental analysis.
- **Performed general core descriptions**, documenting sediment composition and structure.
- **Conducted charcoal analysis** on 390 cm of sediment, constructing age vs. depth profiles.
- **Led writing and research presentations** at scholarly events, including the Oshkosh Celebration of Scholarships, Madison Research at the Rotunda, and the Midwest Undergraduate Geography Symposium (MUGS).

Characterizing the Geomorphology of Coastal Montane Streams – Robbins River, Jamaica,
Facilitated by University of Wisconsin- Oshkosh & Dr. Bowen, Summer 2018

- **Conducted field research** at Robbins River in Jamaica, studying watershed dynamics.
- **Assisted in data collection** for watershed analysis, contributing to environmental studies.
- **Supported beach surveying and analysis**, assessing coastal conditions.
- **Led longitudinal and cross-sectional profiling** at various sites along Robbins River, including Wolman pebble counts.
- **Analyzed and presented research findings** at the Oshkosh Celebration of Scholarships.

Bird Strike Study Researcher, *University of Wisconsin- Oshkosh, Spring 2019*

- **Conducted field research** for faculty-led bird strike studies.
- **Collected data daily for 21 consecutive days**, monitoring campus buildings.
- **Assisted in data interpretation and report writing**, contributing to research findings.

Belize Study Abroad, *Facilitated by University of Wisconsin- Oshkosh, Jan 2019*

- **Completed coursework** in Approaches to Resource Management in Tropical Ecosystems.
- **Traveled to Belize** to conduct field research on soil conservation practices.
- **Investigated soil conservation strategies** implemented across the country to minimize nutrient loss and erosion.
- **Explored diverse ecosystems and cultures**, gaining firsthand insights into environmental and agricultural management.

Awards & Activities

Awarded, *Research at the Rotunda Presenter*

- Chosen by the University of Wisconsin System to present current research findings at Wisconsin State Capitol to politicians and lawmakers
- Showcasing my research: Long-term Fire History from Bass Lake Northeastern Wisconsin.

Awarded, *James F. Goff Endowed Geography Graduate Research Award*

- Award amount given: \$4,300

Awarded, *Registration Scholarship- 2021 Soil Management Summit*

- Soils management summit by the University of Minnesota Extension
- Award amount: \$155

Awarded, *Summer Research Grant from the University of Wisconsin Oshkosh, 2018-2019*

- Awarded Summer research grant for \$3,550 in the Summer of 2018 and Summer of 2019
- Only person from program history to be awarded this scholarship for two years in a row

Awarded, *Clow research grant from the University of Wisconsin Oshkosh, 2020*

- Faculty research award for project presentation

Awarded, *Warner Geiger Geography Merit Award from University of Wisconsin Oshkosh geography department, 2020*

- Geography department award based on GPA and Leadership qualities

Awarded, *Bruyere Award from the University of Wisconsin Oshkosh geography department, 2020*

- Geography department award presented to a student who has demonstrated they have gained comprehensive knowledge of major world regions

Student Athlete, *University of Wisconsin- Oshkosh Swimming, 2016-2020*

- **Dedication and organization** are essential with sports and school
- Participated with volunteer opportunities as a team
- Part of the conference meet swim team

Volunteer, *University of Wisconsin-Oshkosh Geography Lab, 2017-2020*

- UW-Oshkosh Geography Dept Soils lab worker
- Analyzed and recorded soil core data
- Cleaned and organized equipment
- Tested soil pH levels and Electromagnetic conductivity
- Studied Charcoal accumulation in lake sediment cores

Volunteer, *NRCS Appleton Office earth team volunteer, 2018*

- Carried out various office work
- Scanned wetland maps of the county and updated current maps
- Conducted field surveying and imaging

Volunteer, *Oshkosh Special Olympics Swim team, 2016-2019*

- Coached the special Olympics kids swim team
- Taught basic fundamentals of swimming
- Managed their well being
- Coached at swim meets

Member, *SEAC, Student Environmental Action Coalition, 2016-2020*

- Worked together as a student organization to improve our campus environmentally as well as interest others in the major

Member, *Geography Club (Vice President), 2016-2020*

- Worked together to bring a better understanding of the environment to the public and worked to provide speakers and activities to bring awareness to the geography major on campus.

Presentations

- Brianna Hauch, **Doyon's Trespass Mitigation Program**. Presenter through a Doyon, Limited facilitated Webinar to Village Corporation and Village Tribal Leaders. Twice in 2025
 - Brianna Hauch, **Doyon's Trespass Mitigation Program Overview & Updates**. Presenter through an Alaska village-based radio show *KRFF 89.1*. 2025
 - Brianna Beseler & Dr. Colin Long, **Long Time Fire History Above the Tension Zone**. Presenter at UW-Oshkosh Celebration of scholarship event. 2020
 - Brianna Beseler & Dr. Colin Long, **Long-term Fire History from Bass Lake Northeastern Wisconsin**. Presenter at Research at the Rotunda, Madison WI. 2019
 - Brianna Beseler & Dr. Colin Long, **Long-term Fire History from Bass Lake Northeastern Wisconsin**. Presenter at UW-Oshkosh Celebration of Scholarships event. 2019
 - Brianna Beseler & Dr. Colin Long, **Long-term Fire History from Bass Lake Northeastern Wisconsin**. Presenter at MUGS (Midwest undergraduate geography symposium) 2019
 - Brianna Beseler & Dr. Mark Bowen, **Characterizing the Geomorphology of Coastal Montane Streams – Robbins River, Jamaica**, Presenter at UW-Oshkosh Celebration of Scholarships event. 2019
-

Work Experience:

Lands & Natural Resource Specialist III

Doyon, Limited (August 2022- Present)

- **Oversee land management programs** across 12.5 million acres of Doyon-owned private land.
- **Leading trespass mitigation efforts**, ensuring compliance and enforcement of land-use policies.
- **Managing the temporary land use permit program**, overseeing applications and approvals.
- **Researching and securing relevant land permits** for various projects and developments.
- **Traveling to rural villages** to collaborate with local landowners on land-use issues.
- **Engaging with corporate and tribal leadership** to coordinate land management strategies.
- **Reviewing and applying land ownership laws** to ensure legal and ethical land use.
- **Utilizing ArcGIS Pro** to create and analyze maps for land planning and development.
- **Directed logistics for reforestation projects**, ensuring efficient resource allocation to plant over 30,000 seedlings.
- **Serving as an alternate contact for the Alaska Fire Service**, supporting fire management efforts on Doyon Land.
- **Conducting site visits and assessments** for shareholder timber use and sustainability planning.
- **Lead evaluations for gravel site development**, determining feasibility and impact.
- **Performing SWPPP site analysis and data collection** to support environmental compliance.

Assistant Swim Coach

North Pole Aquatic Club (NPAC) & North Pole High School (September 2024-Present)

- **Teach swimming techniques** – Instruct swimmers on proper strokes, breathing, and turns.
- **Develop training programs** – Create structured workouts tailored to different skill levels.
- **Evaluate performance** – Provide feedback to swimmers to improve technique and speed.
- **Supervise swim meets** – Attend competitions and guide athletes through races.
- **Communicate with parents and staff** – Keep families informed about schedules and progress.

Soils Crew Field Technician (Alaska)

National Science Foundation (NEON project through Battelle) - (June 2021-October 2021, re-hired for 2022 term as Lead)

- **Conducted field research** in the Tundra/Taiga domain, studying environmental conditions.
- **Served as a soil crew member**, assisting in data collection and analysis.
- **Performed seasonal fieldwork**, adapting to varying environmental and weather conditions.
- **Executed soil coring and laboratory analysis**, contributing to soil composition studies.
- **Measured and analyzed soil pH**, nitrogen transformation, and microbial biomass.
- **Collected and identified** mosquitoes, beetles, ticks, plants, and moss for ecological research.

Graduate Research & Teaching Assistantship

Minnesota State University Mankato- (August 2020-July 2022)

- **Served as a research assistant and teaching assistant** in the Geography Department.
- **Conducted research in the Earth Systems lab**, supporting various environmental studies.
- **Performed sample collection and particle size analysis**, contributing to geospatial research.
- **Collected and interpreted Pb-210, C-14, and C-13 data** for geological and environmental assessments.
- **Completed detailed soil core descriptions** to support soil classification and analysis.
- **Maintained lab cleanliness and organization**, ensuring a functional workspace.
- **Handled teaching lab setup and cleanup duties**, preparing materials for coursework.
- **Led instruction and lab sessions** for introductory soils courses, guiding student learning.

Bartender at The Buffalo Saloon

Cochrane WI -(July 2020-May 2022)

- Head Bartender
- In charge of opening & closing
- money handling
- event worker

Bartender at Uptown Tavern

St. Clair MN-(August 2020-May2022)

- Bartender
- In charge of opening & closing
- money handling
- Cooking
- event worker

Schlawin/Baloun Family farmhand

Present (My Family Farm)

- Beef cow/calf and cropland operation
- Assists with planting and feeding of cows
- Assist in cow vaccinations, castrations, hoof trimmings, animal upkeep
- General maintenance
- Assist in planting and harvesting operations
- Implementing and utilizing relevant soil and land conservation methods

Lifeguard at UW-Oshkosh

2019-2020

- Perform daily cleaning tasks
- Entrusted to guard others

Lifeguard and Swim Instructor at Oshkosh YMCA (20th)

2017-2018

- Perform daily cleaning tasks
- Daily water quality testing
- Increased my ability to focus by having others trust me Lifeguard and

Swim Instructor at Scenic Valley Swimming Pool 2014-2017

- Performed water quality tests daily
- Had cleaning and waste management tasks
- Gained social skills by working front desk
- Entrusted with money management