

**Environmental Career Readiness**  
**Career Plan**  
By UNI Student

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# **Section 1: Career Identification**

In this section, I give an overview and comments on some of the different jobs and job types I am interested in.

**Job 1:** Forester/Arborist - Temporary

**Summary of the Job:** “Apply a wide variety of forest management techniques to perform post forest fire assessments in areas of conifer and mixed deciduous forests. Expectations are to conduct tree inventories, prepare reports, conduct tree risk assessments, and provide information and potential solutions related to potential tree-related hazards and risks.”

**Why this job appeals to me:** This job appeals to me because it is a large amount of outdoor fieldwork, which I would really enjoy doing instead of working in an office. On top of this, it is mostly an independent type of job, with not a ton of supervision. Part of the job description is “Fieldwork to be performed in all weather conditions, steep, rough terrain, and various settings, including open fields and forested areas,” which may be an issue for some, but I would personally really enjoy most of this, especially the hiking and rough terrain part. There are a couple of issues I would definitely have in applying for this job right now however because they require 5 years of experience in the forest industry along with a car specifically to be able to drive in rough terrain. However, in the future, I think a job like this would be a good fit for me.

**Job 2:** Terrestrial Insect Ecologist

**Summary of the Job:** “This position is responsible for supporting the design, development, coordination, and implementation of our statewide native insect

conservation and management programs, serves as an expert in one or more groups of native terrestrial insects for the department; supports science-based determinations of the status of rare native terrestrial insect Species of Greatest Conservation Need; conducts inventory, research, and monitoring in areas or habitats where information is lacking in support for department master planning and the WI Wildlife Action Plan.”

**Why this job appeals to me:** This job appeals to me because one of the main parts of it is to monitor and research the habitats of insects. This would include both of my interests in working outside and studying animals. This is also a more independent job, and even though it requires you to serve as an expert, I enjoy giving presentations and educating or informing people about areas I am well educated on. Of course, at this moment I would have a lot of difficulties applying to this job because it requires me to have more expertise on this topic, but luckily for me, this topic is one that I would really like to focus on in the future. This includes different classes I am interested in taking, along with a possible focus on my future undergraduate research.

### **Job 3: Fish and Wildlife Biologist**

**Summary of the Job:** “Plans, evaluates, conducts a wide variety of complex ecological investigations or inspections, evaluates biological data, submits recommendations to the supervisor on technical and policy matters, plans, organizes, and implements biological work and/or habitat preservation and development work, and develops, directs, and ensures completion of program objectives”

**Why this job appeals to me:** This job appeals to me because it involves a lot of investigations and inspections ecologically, which I am assuming means work in the field. Other things I am interested in with this job involve implementing my work into habitat preservation. One thing I would really like to be involved in in the future is the development of habitats and preserving those habitats to help the fight against climate change. The only thing I don't think I would be super excited about with this job is the amount of work I would have to do in an office, but it seems like overall it is mostly fieldwork and implementation of that fieldwork.

## **Section 2: Statement of Purpose**

In my Statement of Purpose, I share my professional objectives and purpose in a future environmental career and how they align with a job like that of Lynn Koch. Lynn Koch is the game warden for Black Hawk County and is featured on pages thirty-five and thirty-six of my Environmental Career Encyclopedia.

## Statement of Purpose

From the time I was a child, I have been interested in plants, animals, weather, geology, and anything else to do with the great outdoors. I loved playing in the creek behind my house, exploring the woods behind my neighborhood, catching bugs, collecting rocks and leaves, and watching birds and other wildlife. I was always fascinated by nature documentaries, books about different types of animals, and everything else to do with the environment.

Now, as a newly graduated alumnus of the University of Northern Iowa, with a Bachelor of Science in Biology; Ecology, Evolution, and Organismal Biology and a Bachelor of Arts in Environmental Science, I am more than excited to explore my passions in the workplace. I am also excited to contribute to helping more citizens discover their love and passion for the outdoors and educate them on the importance of the ecosystems and environment of our planet.

During my time as a student at the University of Northern Iowa, I worked diligently to complete undergraduate research in (insert research area here). I also worked directly with the Green Iowa Americorps branch of Environmental Education to create programs for teachers all across Iowa on topics to do with environmental science. These experiences have given me more experience in various skills such as problem-solving, communication, and professionalism while also advancing my skills in researching and using tools and tests to study the environment.

The current situation of climate change is ever-present in everyday life. It's harming not just our overall ecosystems, but also the individual lives of the plants and animals whom we share our home with. I hope that my potential career as a Game Warden will help contribute to the fight against climate change. Through using my individual skills and passions to work with others in this field, I believe I can make a positive difference in the world.



## **Section 3: Resume**

This section features my resume as of April 2020.

## EDUCATION

**The University of Northern Iowa**, Cedar Falls, IA

*Bachelor of Arts in Biology: Ecology, Evolution, and Organismal Biology, Bachelor of Arts in Environmental Science, May 2025*

- Sustainability Certificate
  - XXX cumulative GPA
- 

## EXPERIENCE

**Hy-Vee Fast and Fresh**, West Des Moines Iowa

*Cashier, Stocker*

June 2021- August 2021

- Interacted and communicated with customers and staff
- Trained new employees in a wide variety of skills
- Prepared food for customers from a large menu and adjusted for dietary needs or customer satisfaction
- Created and taught a new system when preparing food to make overall work more efficient
- Praised for my professionalism and work ethic
- Improved skills in professionalism, problem-solving, teamwork, and customer service.

**Bredeaux Pizza**, Grimes Iowa

*Food Prep and Cashier*

December 2020 - April 2020

- Interacted and communicated with customers and staff almost constantly
  - Trained 8 new employees on a variety of opening and closing procedures
  - Created and taught a new system when washing dishes and cleaning that made closing more efficient
  - Was complimented for my hard work and attention to detail
  - Improved skills in professionalism, leadership, and problem solving
- 

## LEADERSHIP & ACTIVITIES

**Model United Nations**, Cedar Falls Iowa

*Member*

August 2021 - Present

- Attended multiple out of state conventions with a student-led group
- Worked with different members from many different social and cultural backgrounds on passing resolutions to be viewed by the United Nations
- Problem solved and created bonds with members

**Band**, Woodward Iowa

*Drum Major, Member*

August 2017 - May 2021

- Assistant to the band director, announced at concerts and put together programs
  - Over 80 hours of volunteer work
  - Played multiple instruments, and trained others how to play
- 

## ADVANCED SKILLS

- Proficient in Google Drive, Microsoft Word, and Excel

## **Section 4: Intersection of Humanity and the Environment Statement**

In this section, I give an overview of how my professional choices will affect others around me on a local and global scale.

## **Intersection of Humanity and the Environment Statement**

The current climate crisis is extremely prevalent in our ever-changing world. Just a few years ago, a derecho or a land hurricane ripped through Iowa and my backyard in a way many of us never saw coming. Extreme weather events are happening all over the world, with huge wildfires in Australia and the Western and Southern United States, freak rain and snowstorms, and dramatic heat waves all over the world. Oceans are filled with microplastics, icebergs are melting, and habitat loss increases every day in places like the rainforest and Australia. But, these are things many of us already know, so how is a single person supposed to help slow down these changes? Well, it can start in the workplace. In this statement, I will go over some of the professional choices I would like to make in the future to help both local and global communities. I will do this by not only becoming more environmentally friendly and incorporating this into my professional choices.

In the future, I would like to make a difference in the world by choosing a workplace that aligns with my goals. Working for a place that puts sustainability and awareness of the overall environment at the forefront of its practices is extremely important to me. I will never work for a company that puts its own capital gains above local and global communities, the environment, and its employees. I won't work for a place that hurts local communities through things like taking or destroying property, decreasing the quality of life in the area, or polluting the environment in the area with different types of emissions or runoff.

The workplace I choose in the future will promote decreasing their and their employee's carbon footprint and will listen to the facts and care about the science when it comes to the environment and all other pertaining subjects. If my workplace in the future is still taking the steps towards this but isn't quite at the place where it should be, I will put in my own work to help the company reach its potential in this area.

Looking at the future, the current climate crisis will get worse without change. It is not only important to hold myself and other individuals accountable, but also the small and large businesses and corporations that we work for.

# **Section 5: Developing Content**

## **Expertise**

In this section, I show some different ways that I am developing my expertise in different areas. This includes both current and future projects in high school, college, and the field.

Note: I do not have a ton of content for this section because of my freshman status, but I included some of the different ways I know I will be developing my expertise in the future.

## High School

- Classes in Environmental Science and Biology
- Experience in different clubs/activities
  - Speech
  - Band
    - 8 years
    - Drum Major
    - Over 80 hours of volunteer work
  - Cheerleading and Dance Team

## College

- Completed Courses
  - Environmental Career Readiness with Dr. Heinzl
    - Objectives: “Will explore career opportunities and the steps needed to achieve academic and career success. Students will explore career pathways through current literature, networking with practicing environmental professionals, and community engagement. Skills in quantitative reasoning, scientific reading, writing, speaking, geospatial awareness, and systems-thinking will be practiced, assessed, and developed.”
    - Skill Development: In this course, I developed my skills in critical thinking, questioning, networking, writing, speaking, leadership, and teamwork.
  - Intro to Geology with Lab with Dr. Heinzl
    - Objectives: Introduction to the physical environment, emphasizing materials of the Earth and processes that lead to changes within and on the Earth. Lab emphasis includes rocks and minerals, geologic processes, and landscape development.
    - Skill Development: In this course, I developed my skills in observation and identification, critical thinking, using a microscope, using various lab equipment, teamwork, and observing and understanding maps.
  - Biology: Cell Structure and Function with Lab with Professor Jeremme Jackson
    - Objectives: Cell Structure and Function provides a broad introduction to cellular and molecular aspects of biology to science majors. Students will examine the properties and functions of biological molecules, organization of living cells, production and utilization of biological energy, and development of multicellular organisms.
    - Skill Development: In this course, I developed my skills in teamwork, critical thinking, observation and identification, using a microscope, pipetting, and other various laboratory skills and equipment.

- Future Courses
  - Statistics
  - Chemistry 1 and 2
  - Organismal Diversity
  - Geologic Field Methods
  - Natural Resource Civilizations
- Completed Projects
  - Environmental Career Readiness
    - Encyclopedia
    - Career Plan
    - Outdoor Table for Earth Week
- Future Projects
  - Undergraduate Research

## **Field Experience**

- Current
  - Hiked up Pinnacle Mountain at Pinnacle Mountain State Park, Little Rock Arkansas
- Future
  - Work with Green Iowa Americorps
  - Various Hikes
  - Certification in GIS

## **Lab Skills**

- Current
  - Pipetting
  - Observing through a Microscope
  - Lab Safety
  - Identification and Observation
  - Ability to follow the scientific method
- Future
  - I would like to develop my lab skills in all of the above areas, as well as different chemistry skills

## **Section 6: Deliverables**

In this section I showcase a couple of the different deliverables I'm able to provide now, or ones I plan on completing and using in the future.



**Environmental Career Readiness Classwork:**

My classwork in both this career plan and also the encyclopedia are both examples of my work that I am proud of and I believe they align with my future career goals. In this career plan, I feature a lot of the different documents I will be using to find my future career. I also go over a lot of the different ideas I would like to implement into my future career choices. My encyclopedia features my ability to note take, summarize, and compile different types of information into a well-organized and easily accessible format. Both of these showcase what I believe future employers or future graduate schools will be looking for when I apply to them.

**Project with Green Iowa Americorps and Undergraduate Research:**

Although these both are not completed, and therefore cannot be showcased, I still believe I will put in the work needed and be proud of both of these in the future.

My project with Green Iowa Americorps will be taking place over the summer of 2022 and will be completed over the 300 hours I will have done while working with them. I am not sure exactly what this project will be, but I do know that it will align with my ideas in both my statement of purpose and my Intersection of Humanity and the Environment Statement.

My undergraduate research, although not happening now, will be worked on and completed before I graduate from the University of Northern Iowa in the future. I believe that this research will be able to be presented to future workplaces or graduate schools to help me in these searches.

## **Section 7: Preferred References**

This section highlights some of the preferred references I have right now.

## Current Preferred References

XXXX

- Manager at Hy-Vee Fast and Fresh in West Des Moines Iowa
- Phone Number: xxxxxxxxx
- xxxxx was my manager at Hy-Vee Fast and Fresh over the summer of 2021. He can attest to my skills in teamwork, leadership, and communication.
  
- High school math teacher for AP Calculus, Trigonometry, Precalculus, and Geometry
- Email: xxxxxxxxxx
- Ms. xxxxx was my math teacher in high school. She can attest to my skills in independent study, ability to understand and work through complex ideas, integrity, teamwork, and leadership.

xxxxxxx

- High school and middle school band instructor
- Email: xxxxxxxxxxxx
- Mr. xxxxx was my high school and middle school band director. He can attest to my teamwork and leadership skills, along with my ability to pick up difficult skills quickly.

# **Section 8: Reflection, Synthesis, and Timeline**

In this section, I have a timeline and a reflection of my portfolio.

## Timeline:

- Freshman Year
  - Classes: Biology, Environmental Career Readiness, Intro to Geology
  - Field Experience: Green Iowa Americorps Work
- Sophomore Year
  - Classes: Statistics, Natural Resources, Chemistry, Chemistry 2, Organismal Diversity, Geologic Field Methods, Natural Resource Civilizations
  - Field Experience: Internship with the DNR? More Green Iowa Americorps Work?

Since I am just starting out at UNI as a freshman, I do not know what I will be doing in my junior year and beyond. However, I did work with my advisor to make a tentative schedule that I have included below. I would also like to take various paid internships or jobs that will help me grow my skills and help me towards my career, I am just not sure what those will be yet.



**Academic Planning Sheet:** This plan is **TENTATIVE** and provided for your convenience. It is not an official document; it does not replace the Academic Advisement report. This is intended as a tool for students. It is the student's responsibility to monitor program and graduation requirements using official University reporting systems.

<b>Fall 22</b>	<b>15</b>	<b>Spring 23</b>	<b>14</b>	<b>Summer (classes not guaranteed)</b>
ChEM 1110	4 credits	Chem 1120	4 credits	
Stats	3 credits	Geog 3310	3 credits	
Biol 2051	4 credits	EarthSci 1200	4 credits	
EarthSci 3370	4 credits	Human Cond Domestic	3 credits	
<b>Fall 23</b>	<b>13</b>	<b>Spring Term 24</b>	<b>14</b>	<b>Summer (classes not guaranteed)</b>
Biol 3100	3 credits	Bio 3140	4 credits	
Chem 2040	4 credits	Biol 3000 elective	4 credits	
EarthSci 3345	3 credits	Biol 3000 elective	3 credits	
PH 3710	3 credits	EarthSci 3350	3 credits	
<b>Fall 24</b>	<b>15</b>	<b>Spring 25</b>	<b>17</b>	<b>Summer (classes not guaranteed)</b>
Math 1140	4 credits	EarthSci 4400	2 credits	
Biol 4000 elective	4 credits	Biol 4000 elective	4 credits	
Biol 3000/4000 elective	3 credits	Biol 3000/4000 elective	4 credits	
EarthSci 3230	4 credits	EarthScie elective	4 credits	
		Responsibility	3 credits	
<b>Fall</b>		<b>Spring</b>		<b>Summer (classes not guaranteed)</b>
EarthSci elective	14			

## Reflection and Synthesis:

These are some skills reflected throughout my career plan, and how these align with my future career.

- 1) Teamwork
  - a) I will use my skills in teamwork in my future career to collaborate with other specialists in my field on different projects. I will also use my skills in this to collaborate with other people who might not be knowledgeable in this area.
- 2) Communication
  - a) This skill goes along with teamwork because I will be using my communication skills to work with and collaborate with others. I will also be using this when I give presentations and talks about my research.
- 3) Critical Thinking
  - a) I will use my critical thinking skills throughout my career in a variety of different ways. I will be using this when I work in the field, work with others, and overall in many different environmental science careers.
- 4) Laboratory Skills
  - a) I will use my various laboratory skills when working in the field and also when I have to do any testing or observations in the lab.
- 5) Leadership
  - a) I will use my leadership skills when I am working on a team.
- 6) Passion for the Environment
  - a) This isn't really a skill per se, but I believe it is an important component to have when looking at my future career. My passion for the environment, plants, and animals will contribute greatly to my growth in my future career.

I will maintain this portfolio by attending seminars, completing different certifications, and being involved in different organizations. When adding things to my portfolio, I will only include what is relevant to the career I am working towards. I hope to keep this portfolio updated throughout my life, as it will greatly help me in my future career.