Introduction

Wildlife care and handling requires a specialized set of skills used in working with captive wild animals as part of research programs, zoos, private facilities and care centers in the United States and in many other countries. Although there are national\(^1\) and international\(^2\) organizations that set professional standards for wildlife care and handling, standards of practice vary greatly, often leading to animal welfare concerns such as increased stress, poorer health outcomes, and inappropriate release. This externship class is the capstone experience of the Wildlife Care and Handling Minor curriculum. The class synthesizes the practical skills and experience in care and handling of captive wildlife that you have developed in your earlier classes in the Minor. The class requires a minimum number of 200 hours of supervised experience in a wildlife handling setting. This capstone is a guided, supervised, hands-on, on-site experience complemented by pre-, during- and post-experience reflection and analysis. When several people are enrolled in the class simultaneously, we engage in guided, interactive discussions among all participants, seeking to optimize each person’s experience.

Schedule and format

Instructor Jim Perry, Jperry@umn.edu, 320 Hodson, St Paul campus

This is a hybrid class, much of which is conducted online, using Canvas. There are three units to the class:

1. **Preparation for the externship:** We meet on campus weekly, for the first seven weeks of the semester. During this initial time, we will discuss and contrast animal care and handling in a wide range of settings (e.g., free ranging vs. captive wildlife, temporary vs. permanent captive settings). We will agree on the criteria used to locate and fulfill an externship. You will identify three potential hosts, progressively learn about them and refine your list to the one where you will serve the externship (probably in the summer).

2. **Engaging in the externship:** You will be in-place, working in setting that involves care and handling of wildlife, for a minimum of 200 engagement hours. While you are working in the externship, you and I will interact at least six times when you write your reflective observations.

3. **Reflecting on the externship:** After the externship is complete, you will write a reflective essay about your experience.

\(^1\) [http://www.nwrawildlife.org/](http://www.nwrawildlife.org/)

\(^2\) [http://www.cwrexam.org/certification/](http://www.cwrexam.org/certification/)
Role in the curriculum at the University
This class does not fill the role of Professional Experience as defined in the FWCB or other curricula. This is a class during which you experience and learn about care and handling of wild animals. The Professional Experience requirement must be met by being professionally engaged in the field (e.g., through internship or research).

Background

• **What is an externship?** In our context, an externship is a resident, professional experience in which you work hands-on with wild animals. Animal care in this sense might include wildlife research focused on capture and handling, rehabilitation, or permanently- or temporarily-captive wild animals. The residency might mean that you are working in a facility (e.g., zoo, nature center, sanctuary, rehabilitation facility, rescue center, wildlife care facility) or might mean that you travel to provide care (e.g., working with a DNR wildlife field crew). The externship must provide hands-on experience with care of wild animals, and must involve at least some understanding of the mission and overall operation of the facility or organization (e.g., how are decisions made about financing, size and composition of the resident animal population (which animals and which species are accepted?), fund raising, communication with the public).

• **How much is involved?** The externship required by the Wildlife Care and Handling Minor requires a minimum of 200 hours work experience. That experience must be certified by the externship host (e.g., your supervisor or the facility director).

• **A supervised work experience** The work experience must be supervised by someone at the host institution. This requirement ensures that animals are treated well and that you, as a student, accumulate knowledge and experience that will allow you understand and perhaps work in a wildlife care and handling setting in the future.

• **What kinds of activities are involved?** As a WCH student, you will be involved in the care and handling of wild animals. The specifics will depend upon whether you are dealing with free-ranging wildlife or managed captive wildlife, and the type of facility. You also will be involved in many routine tasks required for care of captive wild animals (e.g., feeding, cleaning animals and their facilities). In some facilities, you may be involved in the medical care of animals under the supervision of a licensed veterinarian. This experience will also involve discussions about and awareness of larger issues in the wildlife field, such as ethics, when euthanasia is necessary, population level impacts of various actions, the role of invasive species in ecosystems and the role of individual exotic animals in populations within a landscape.

• **How will anyone know what I did?** Your externship experience will be based in a learning contract developed and approved by you, your externship host and the Minor Coordinator. That contract will specify at least the kinds of activities involved, the amount of time to be invested, supervision, and communication (e.g., journals and writing expected, as detailed elsewhere in this syllabus).

Finding a Host

• **Criteria:** A suitable host for the externship is either a) a wildlife care facility that has captive wild animals, or b) a wildlife management organization in which your role is to aid in the capture and handling of wild animals.
  o **A wildlife care facility:** Most students in the Minor will conduct their externship in a resident facility (e.g., a zoo, nature center, breeding center for endangered species, sanctuary, rescue center, a wildlife care facility where injured animals are given medical attention).
• **A wildlife field crew:** Many wildlife management and study abroad experiences offer internships or other experiences in which you participate somewhat superficially in animal handling. Those experiences generally are NOT adequate for this purpose. A field crew experience that IS appropriate for this experience will engage you intensely in capture, immobilization, handling, care and monitoring of wild animals.

• You are responsible for locating a suitable host and getting a contractual agreement signed by three of us: you, me and that host. I have developed an Externship Host table as a resource to help you do that. Note that the table includes only exemplary facilities, places you might approach or examples of places where you might seek an externship. You are welcome to propose your own host, and then proceed to develop an appropriate contract to be agreed upon by all three of us. For each facility in the table, I have included:
  o Taxa upon which you might focus (e.g., terrestrial mammals, birds, aquatic species)
  o Geography where you might seek a position (e.g., Minnesota, elsewhere in the US, Asia, Southern Africa)
  o Organizational details like address, contact information, mission, infrastructure for each facility, numbers and kinds of animals usually available, housing, activities conducted by volunteers, potential costs, potential compensation (which is unlikely), and in some cases contacts to former volunteers from whom you can seek guidance
  o An exemplary letter of introduction you might use to introduce yourself to a potential host

• Consider your budget and your life plans; think about your personal, academic and professional goals for this experience. Explore the Externship Host table, as well as other facilities you find on your own. Find three potentially interesting hosts and begin to explore. Later in the semester, when you have found the externship facility you find most interesting, make contact and begin a discussion about a possible relationship that might let you complete the externship.

**Costs and budgeting**

• The class is 3 credits; tuition for the class is part of Spring semester. There is no direct cost during summer. You enroll in the class in Spring and receive a K grade; that means your university health insurance remains in place during the summer. Note that most facilities will require that you have most or all of the following: rabies vaccination or titer, tetanus vaccination, influenza vaccination, TB test, and physician’s note if you are immunocompromised.

• Externships are rarely compensated by the host; in most cases, they are a volunteer experience. If the facility is distant from campus, you should anticipate that costs will include travel (perhaps airfare), housing, food, and incidentals.

**Class expectations**

**Pre-thought** Before you engage in the experience at the host institution,

• Complete the series of readings and exercises included on the Canvas site.

• Develop a thoughtful essay describing your professional, academic and personal goals for this class. In this context, **professional** means your long term (e.g., 5-7 year) goals for your career; where do you see yourself in that time frame and what might this class contribute to that? Similarly, **academic** means your academic path over the next 1-3 years; as you complete your major, how do you hope this class will help? **Personal** means ways you feel you might grow and/or be challenged, like new cultures, new country, new friends, struggles with food or personal dynamics.

• I will understand if you feel **How would I know? I am just planning this experience!** This opening essay serves two purposes: it encourages you think about the externship experience in advance and therefore become a little more curious and aware as you go along. It also provides a
background. At the end of your externship experience, I will ask you to write again, reflecting on these goals and the experience, and asking what worked out and what did not?

- This opening essay should be posted to Canvas as a Word document; it should be 11 point Calibri font, 1” margins, and single spaced. It should be long enough to be clearly thoughtful and to present your ideas. It does not make sense for me to prescribe a specific length, but “less than a page is too short and five pages is too long”.

**During the experience at the host institution**

- **Your journal** Maintain a daily journal while you are working in the externship. The journal serves three purposes
  
  o It will help you become and remain aware of your understanding and your feelings about wildlife care and handling as your experience develops.
  
  o It will serve as documentation of problems encountered and solutions you developed as the externship matured.
  
  o It will serve as memory-trigger and personal growth documentary for you, long after the experience is complete.

- **Format**
  
  Your journal is an important resource as you work your way through this externship experience. Your journal will help you organize your thoughts, build upon new knowledge, revisit your ideas, and provide a structured place for reflection. Your journal is a place where you can share personal insights, struggles, and experiences. It is a resource that will be reviewed by your instructor, so take that into account and decide how personal you want your expressions to be. With that caveat, I will regard your journal as confidential and only share specific insights, comments, or reflections with prior permission. Your journal is a bridge between personal insights and academic knowledge. The journal experience guides you to record what you feel and think now, to build a detailed record of your externship experience, and allow you to revisit your early thoughts to see how you’ve learned and grown as a wildlife professional and as a global citizen.

  Use a glue-bound notebook for your journal. Examples are Moleskin journals, K&E Field Notebooks or bound, hard cover, empty books. Your journals will be with you in many settings; you cannot guarantee that you will only want to record entries in the evening, after handling the animals. That’s why you can’t build your journal electronically.

  As scientists and explorers, we encounter many wildlife care and handling situations, and we use a wide variety of skills. Your journal is a resource to carry with you and use consistently. It is important for data collection, but it is much more than that. As you feed, tend to, or clean up after animals, you will think of questions about that specific animal, their role in the population, and your role in tending to that animal. You will not remember those things if you wait until you are back from the field, back home or in your room and have an opportunity to write them down. Keep your journal with you as you make observations, consider questions, and make connections. Use your journal to document your ideas, or record your questions. You are required to record a daily entry at the least. Build a clear system of organization. A sample of entry headings and questions to drive your reflection is provided on the Canvas site. You do not need to use all those headings and you are welcome to build your own. Make sure the way you design your journal keeps your information clearly
organized and easy to access. This is not a place to scribble notes. Rather, it is a record and a resource. You will be surprised how much you refer back to your journal as you write your longer term reflections and later, as you look back on your experiences. The higher the quality of your records, the better resource your journal will be.

- In addition to the journals, post six essays to the Canvas site
  - The schedule and expectations for each are on the Canvas site under Assignments and under the On-Site Module (same thing, both places)

After the experience at the host institution
- Complete the series of readings and exercises included on the Canvas site
- Develop two essays:
  - Post to Canvas where other students and I can see it: Academically and professionally (in this context, *academically* means completing your education and *professionally* means framing your experience as a member of society, filling a professional role),
    - How did this experience compare with your expectations?
    - Which of your goals were achieved and which were not?
    - Which specific activities advanced your goals?
    - What suggestions would you have for future students hoping to complete an externship at this host?
  - Send to me privately via email: Personally,
    - How did this experience compare with your expectations for personal growth?
    - Which of your personal goals were achieved and which were not?
    - Which specific activities advanced your personal goals?
    - Personally, what might you have done differently, and what personal suggestions would you have for future students hoping to complete an externship at this host?
  - Both of these essays should follow the format prescribed above for opening essays

Student Learning Outcomes

- Can identify, define, and solve problems
  - This upper level course engages you, the student, in the dynamics of diagnosis of problems and identity of solutions in wildlife care and handling. Most students in the class will be in a setting that deals with captive wildlife. These animals are in this setting for some societally-approved reason (e.g., held in a zoo, in a medical treatment facility, at a nature center). Some students will be exposed to wildlife in a field setting (e.g., working with a field biologist). In all cases, the animal is under stress; your goal is to collect required information (e.g., diagnose health) being as sensitive as possible to the animal’s welfare. The role of the wildlife care and handling professional is to understand problems in a risk context, making decisions about animal care that are societally approved, based on limited information (to limit stress to the animal), and actionable.
  - The learning is assessed on the basis of student journals documenting your experience, and an evaluative statement by your facility supervisor offered at the end of the field experience.

- Have mastered a body of knowledge and a mode of inquiry
  - Wildlife care and handling is a technical field, based in knowledge of the health and requirements of the animals involved. Some decisions are based at the level of individual animal (e.g., data collection in a field experience, health and welfare in a captive setting). Other decisions are based at the level of a population (e.g., impacts of one or a few animals
at the scale of the population). Other decisions are based at the level of the ecosystem (e.g.,
the role of an exotic or invasive species in an ecosystem or landscape and the influence you
might have by releasing one or a few individuals). In all cases, this is a knowledge-based,
science-based profession. You will be expected to gather and understand technical
information about individual animals, and place that information in the context of larger
societal decisions. That synthesized and interpreted information will guide you in deciding
how to act in various wildlife care and handling settings.

- This SLO will be assessed through journals and synthetic papers written before, during and
  after the externship, as assessed by the instructor. Further, the externship supervisor at the
  host site will be asked to comment on your knowledge, and your ability to synthesize that
  knowledge for decision making about the health and welfare of individual animals.

• Can communicate effectively

- In this advanced class, you will be in a professional setting, in a wildlife care facility or a field
  setting. You will be handling animals to collect information about their health, and you will
  be providing care to keep animals safe and advance their welfare. Wild animals are in
captive settings only because society has decided to invest the resources to provide that
care. In some cases, that involves capturing individual animals to provide data to advance
management of wildlife populations. In other cases, that involves providing care so animals
can be returned to the wild, or retained in captivity for educational purposes. In all cases, it
is our responsibility to communicate with broader society about the care given and animal
health. The effectiveness of all communication is dependent upon the degree to which you
understand the audience with which with you are communicating. You will write journals
(for which the audience is “the future you” and the instructor); you will communicate with
your supervisor, discussing health of the animals and diagnosing decisions to be made. In
most cases, you will also communicate with the public, describing the animals and the care
you are giving.

- This SLO will be assessed through journals submitted before, during and after the externship
  experience, and essays posted to Canvas for discussion with the instructor and other
  students. Communication with the public and the supervisor will be assessed by an
  evaluative summary offered by the supervisor at the end of the externship.

Student Requirements and Grading

My core philosophy of grading is that students should be given the benefit of doubt whenever possible. I
feel that students should have wide varieties of opportunities to excel, and I stress communication,
expression and concepts more than details.

There will be 128 points in the semester. People who earn at least 92% will receive an A, 86-91% a B,
75-85% a C, 65-74% a D. I may lower the grading scale to accommodate natural breaks in the curve.

• On campus
  o Frame your expectations of the class ... 3
  o Develop an entering essay, describing personal, academic and professional goals for the
    class and framing the Minor in the context of those goals .... 10
  o Complete Phase I of facility profiles, contrasting three potential externship hosts .... 10
  o Complete Phase II of facility profiles, further contrasting two potential externship hosts
    .... 10
  o Complete Phase III of facility profiles, characterizing your selected externship host .... 10
  o Five distinct on-line exercises designed to increase our ability to communicate about our
    experiences (1 ot ea.) ... 5
• Digital stories produced while you are in the field
Between 10 & 20 hours: Introduce your facility .... 10
Between 45 & 55 hours: Husbandry .... 10
Between 75 & 90 hours: Behaviour and enrichment .... 10
Between 100 & 120 hours: Immobilization and medical care .... 10
Between 140 & 160 hours: The population .... 10
Approximately at the end: Closing thoughts .... 10
• Post a final Post-experience closing essay to Canvas.... 10
• Total 128

University policies and resources
Academic dishonesty Academic dishonesty in any portion of the academic work for a course shall be grounds for awarding a grade of F for the entire course. I will follow the University of Minnesota policies on academic conduct (http://www1.umn.edu/regents/policies/academic/StudentConductCode.pdf) and academic integrity (http://www.osai.umn.edu/). Scholastic misconduct is broadly defined as "any act that violates the right of another student in academic work or that involves misrepresentation of your own work. Scholastic dishonesty includes, (but is not necessarily limited to): cheating on assignments or examinations; plagiarizing, which means misrepresenting as your own work any part of work done by another; submitting the same paper, or substantially similar papers, to meet the requirements of more than one course without the approval and consent of all instructors concerned; depriving another student of necessary course materials; or interfering with another student's work."

Policy on late assignments and incompletes All assignments must be turned in on the scheduled due dates. In the event of extreme circumstances that prevent you from completing coursework on time, consult with me to discuss alternatives.

Sexual Harassment University policy prohibits sexual harassment (see the December 1998 policy statement, available at the Office of Equal Opportunity and Affirmative Action). Questions or concerns about sexual harassment should be directed to the office in 419 Morrill Hall.

Student Writing Support Student Writing Support (http://writing.umn.edu/sws), 15 Nicholson Hall and satellite locations varying by semester (612-625-1893) offers face-to-face consulting to assist with any writing project. You might also benefit from SWS's web-based resources (http://www.writing.umn.edu/sws/webresources.htm) and from the OnLine Writing Lab at Purdue (http://owl.english.purdue.edu/owl/)

University Libraries You can find research assistance at http://tutorial.lib.umn.edu. The library tutorial, QuickStudy, is a self-paced tutorial covering the research process at the University of Minnesota Libraries.

Disability Services It is University policy to provide, on a flexible and individualized basis, reasonable accommodations to students who have disabilities that may affect their ability to participate in course activities or to meet course requirements. If you have special needs, please consult with me and/or Disability Services (180 McNamara (612-626-1333) V/TTY http://ds.umn.edu/).