



College of Science & Mathematics

BIOL 3315K: Vertebrate Zoology

Course Section: 01 (83022)

Fall Semester 2026 Syllabus

Instructor Information

Nicholas Green, Ph.D.

Email: ngreen62@kennesaw.edu

Office Location: Science (SC) 331

Office Phone: 470-578-6546

Office Hours: By appointment.

Preferred Method of Communication: KSU email.

Course Information

Total Credit Hours: 4

Laboratory / Experiential Field Hours: 3

Course Meeting Information

Course Meeting Time: Lecture: MWF 10:20-11:15

Course Meeting Location: SC 245

Course Meeting Modality: In person

Course Meeting Time: Lab: W 11:30-14:15

Course Meeting Location: SC 245

Course Meeting Modality: In person

Course Materials

There is no required textbook for this course. If you want a textbook, I suggest the Pough et al. Vertebrate Life, 9th edition or later.

Access to a laptop or desktop capable of running RStudio is recommended for some lab activities. If you do not have one, let Dr. Green know 3 business days before the lab so one can be provided for you.

Suitable clothing for field activities is strongly recommended: long pants, long-sleeved shirt, sturdy shoes or boots, and a hat.

Appropriate lab attire is required for all lab activities: long pants that reach your shoes, a t-shirt (no tank tops or bare midriffs), and close-toe and heel shoes (no sandals or Crocs). Gloves and safety glasses will be provided when needed. If you are not dressed appropriately for lab, then you will be required to leave. There will be no negotiation about the meanings of common English words such as “shoes” or “pants”.

This list is subject to change and changes will be reflected on this syllabus as they come about.

- There are no course materials required for this course.

Course Description

Students will use phylogenetic methods to explain evolutionary origins, ecological relationships, and life history traits of vertebrate organisms. In laboratories, students will identify North American vertebrates and analyze the relationship between morphology and taxonomy.

Teaching Methods

This course will use the following teaching methods:

- Capstone Courses and Projects
- Collaborative Assignments and Projects

- Hand-on Learning Experiences / Laboratory Experiments
- Lecture
- Undergraduate Research

Course Learning Outcomes

- Interpret phylogenies to explain evolutionary relationships and the distribution of traits.
- Recall major events in vertebrate evolution.
- Distinguish between major groups of vertebrates using morphological traits.
- Compare key ecological differences among major groups of vertebrates.
- Relate foundational concepts in vertebrate ecology and evolution to topics in medicine and society.

Course Requirements and Assignments

Exams: This course has 3 mid-term exams and 1 final exam. Exams will focus on material encountered in lecture, but any material from the course is fair game. All exams are cumulative. Exams consist of a mixture of defined response (multiple-choice, true-false, and matching) and free response questions (essay or fill-in-the-blank).

Lab assignments: Each lab activity will have either an in-class or take-home deliverable to turn in for credit. For most labs; "turn in" simply means showing Dr. Green that you completed the task. You may miss 1 lab assignment without penalty.

Research project: The lab component of this course is built around a semester-long research project concerning vertebrate evolution. Participation in, and completion of, tasks related to the project are required. A detailed rubric will be provided early in the semester.

Evaluation and Grading Information

Grading scale

This course uses an extended grading scale, which widens the percentage interval of each letter grade. There will be no "curve" or similar *post hoc* grade adjustment.

Percentage ranges for each letter grade.

Percentage	Letter grade
88 - 100	A
76 - 87	B
64 - 75	C
52 - 63	D
0 - 51	F

Grade composition

Course grade is calculated as the mean score on all grade items, weighted by "% of grade".

Contribution of each graded item to course grade.

Item	Percentage of grade
Exam 1	10
Exam 2	10
Exam 3	10
Final exam	20
Lab assignments	25
Research project	25
Total	100

Grading policies

- Exams and assignments will be graded and returned within 7 calendar days of the due date.
- Corrections to exam or assignment scores due to grading errors or issues with exam content must be requested in writing within 7 calendar days of when the paper is handed back to the class. If you miss class on that day, the 7 day review period still starts as if you had been there.
- Challenges to the content of exam questions must be submitted in writing within 7 calendar days of when the exam paper is handed back to the class. No challenges to exam questions will be accepted after this period. Challenges must include an explanation of what was wrong with the question, with reference to reputable sources for matters of fact.

Extra Credit

There is no extra credit available in this course.

Statement on Feedback Expectations and Turnaround Time

Exams and assignments will be graded and returned within 7 calendar days of the due date.

Early Alert / Progress Reports

This class does not participate in Early Alerts.

Midterm Grades

A midterm grade may be assigned by the midterm grade due date identified on the academic calendar. This midterm grade is for assessing mid-semester performance at least one week prior to the last day to withdraw without academic penalty. You may view your midterm grade in Owl Express. Note that only your final grade will be officially recorded on your academic transcript.

Course Calendar

Tentative calendar

Dates are subject to change, with as much notice as possible.

Tentative schedule.

Week	Day	Lecture topic	Lab topic
1	Mon Aug 24	Introduction and phylogenetic thinking	Lab 1: Vertebrate phylogeny
	Wed Aug 26	Introduction and phylogenetic thinking	
	Fri Aug 28	The first vertebrates: Agnatha	
2	Mon Aug 31	Jaws: Gnathostomata	Lab 2: Research compliance
	Wed Sept 2	Jaws: Chondrichthyes	
	Fri Sept 4	Bones: Osteichthyes	
3	Mon Sept 7	Labor Day - No Class	
	Wed Sept 9	Bones: Osteichthyes	Lab 3: Field methods
	Fri Sept 11	Fins to limbs: Sarcopterygii	
4	Mon Sept 14	Fins to limbs: Sarcopterygii	
	Wed Sept 16	Evolution of feeding	Lab 4: TBD
	Fri Sept 18	Body size and life in the water	
5	Mon Sept 21	Exam 1	Lab 5: The mammals of Georgia
	Wed Sept 23	Terrestrial locomotion	
	Fri Sept 25	First steps on land: Stem Tetrapoda	
6	Mon Sept 28	Mostly Terrestrial: Amphibia	Lab 6: Open data for zoology
	Wed Sept 30	Mostly Terrestrial: Amphibia	
	Fri Oct 2	Reproduction on land	
7	Mon Oct 5	Away from the water: Stem Amniota	Lab 7: Data management for zoology
	Wed Oct 7	Life on land is scratchy: Integument	
	Fri Oct 9	Scales and claws and jaws: Lepidosauria	

Week	Day	Lecture topic	Lab topic
8	Mon Oct 12	Scales and claws and jaws: Lepidosauria	Lab 8: Modeling species distributions
	Wed Oct 14	Aquatic again, then not: Testudines	
	Fri Oct 16	Exam 2	
9	Mon Oct 19	Ancient Armored Archosaurs: Crocodilia	Lab 9: Vertebrate morphology 1
	Wed Oct 21	Endothermy and high metabolisms	
	Fri Oct 23	Dinosaurs	
10	Mon Oct 26	Dinosaurs	Lab 10: TBD
	Wed Oct 28	Dinosaurs	
	Fri Oct 30	Dinosaurs	
11	Mon Nov 2	Evolution of flight	Lab 11: Vertebrate morphology 2
	Wed Nov 4	Flying dinosaurs: Aves	
	Fri Nov 6	Flying dinosaurs: Aves	
12	Mon Nov 9	Flying dinosaurs: Aves	Lab 12: TBD
	Wed Nov 11	Exam 3	
	Fri Nov 13	Slightly different skulls: Synapsida and Stem Mammalia	
13	Mon Nov 16	The Mammalian Radiation	Lab 13: TBD
	Wed Nov 18	Modern mammals	
	Fri Nov 20	Modern mammals	
14	Mon Nov 23	Thanksgiving break - no class	
	Wed Nov 25	Thanksgiving break - no class	
	Fri Nov 27	Thanksgiving break - no class	
15	Mon Nov 30	Modern mammals	Lab 14: Presentations
	Wed Dec 1	Modern mammals	
	Fri Dec 3	Human origins	

Week	Day	Lecture topic	Lab topic
16	Mon Dec 7	Human origins	

Final exam: Friday December 11, 10:30 am - 12:30 pm.

Course Policies

Attendance Policy - class meetings:

- Attendance is not required but is highly encouraged. Success in this course is strongly correlated with regular attendance. This means that “excused absences” apply to assignment deadlines rather than routine class meetings. Attendance will be tracked with a daily sign-in sheet.
- If an illness or other issue will prevent you from meeting an assignment or being present for an exam, please contact me as soon as possible ahead of time so we can make alternative arrangements.

Missed exams and assignments

- Assignments and exams must be turned in on time to be eligible for full credit. Late assignments and exams will be accepted but with a score penalty: 20% for up to 24 hours late; 40% for up to 48 hours late, and so on. The late penalty is waived if you miss the deadline for an excused reason (e.g., death or serious illness in the family, jury duty, or other situations at the instructor’s discretion).

Other course policies

- Collegial and respectful behavior towards all people is expected at all times. This does not mean you cannot express your opinions; it means you must be respectful of other people.
- Responsible stewardship of shared laboratory equipment, specimens, and technology is expected at all times. Cases of intentional or grossly negligent theft or destruction of university property will be referred to the KSU police department.
- Data collected in this lab as part of the research project is the property of the instructor, Dr. Nicholas Green of Kennesaw State University, and may not be shared or published without his express written permission.

Modified Operations Policy:

Kennesaw State University is committed to remaining open and continuing full operations, including class schedules, whenever possible. The Office of the President, in consultation with the KSU Office of Emergency Management and other officials, will determine when an emergency impacts KSU's normal operations. When the University is closed due to an emergency, all classes will be canceled, and non-essential personnel will not be expected to work.

When the University shifts to modified operations, Cabinet members, in consultation with the Office of the President or designee and the Office of Emergency Management, will be responsible for determining appropriate operational continuity for their divisions. This may include remote work. During modified operations, each faculty member will be responsible for instructional continuity for their classes. To ensure instructional continuity, all Academic Colleges and Departments are expected to maintain and regularly update instructional continuity plans. All syllabi should also include an instructional continuity plan statement specific to that course.

During a weather event or other emergency, those commuting to campus should exercise their best judgment when determining travel options. If the University remains open and an employee elects not to report to work, the employee will be required to use their accrued vacation time.

The University will announce campus closures and delayed schedules in several ways. The cell phone number on file with the university will automatically receive KSU Alerts, so make sure your information in OwlExpress is accurate at all times. An email will also be sent to your university account.

In addition, announcements will be made by a notice on the Kennesaw State University home page.

Institutional Policies

Academic Integrity Statement:

Every KSU student is responsible for upholding the provisions of the [Student Code of Conduct](#), as published in the Undergraduate and Graduate Catalogs. Section 5c of the Student Code of Conduct addresses the university's policy on academic honesty, including provisions regarding plagiarism and cheating, unauthorized access to university materials, misrepresentation/falsification of university records or academic work, malicious removal, retention, or destruction of library materials, malicious/intentional misuse of computer facilities and/or services, and misuse of student identification cards. Incidents of alleged academic misconduct will be handled through the established procedures of the Department of Student Conduct and Academic Integrity (SCAI), which includes either an "informal" resolution by a faculty member, resulting in a grade adjustment, or a formal hearing procedure, which may subject a student to the Code of Conduct's minimum one semester suspension requirement.

KSU Disruption of Campus Life policy:

All students are responsible for knowing the information, policies and procedures outlined in the Kennesaw State University Codes of Conduct. [Student Conduct and Academic Integrity \(SCAI\)](#) includes: the general Student Code of Conduct, the Residential Code of Conduct, and the Code of Academic Integrity.

KSU Web Accessibility:

Federal law Section 508 Subsection 1194.22 of the Rehabilitation Act and the Board of Regents (BOR) of the University System of Georgia (USG) Web Accessibility Guidelines require that all web content meet the federal government's accessibility guidelines. As such, KSU complies with USG guidelines.

University accessibility assistance is provided by several offices as noted below. Staff in these offices work to accommodate requests for access or assistance with access as soon as possible in order to either accommodate the request or

identify an effective alternative for the requester.

Request for Office Contact Number Contact Email

- Student Support Services Student Disability Services 470-578-2666 sds@kennesaw.edu
- Student Technology Assistance [Student Technology Assistance](#)
- University Information Technology Services 470-578-6999 service@kennesaw.edu
- Third Party Technology Assistance University Information Technology Services 470-578-6999 service@kennesaw.edu

KSU Reasonable Accommodations:

Students with qualifying disabilities under the Americans with Disabilities Act (ADA) and/or Section 504 of the Rehabilitation Act who require “reasonable accommodation(s)” to complete the course may request those from Office of Student Disability Services. Students requiring such accommodations are required to work with the University’s Office of Student Disability Services rather than engaging in this discussion with individual faculty members or academic departments. If, after reviewing the course syllabus, a student anticipates or should have anticipated a need for accommodation, he or she must submit documentation requesting an accommodation and permitting time for a determination prior to submitting assignments or taking course quizzes or exams. Students may not request retroactive accommodation for needs that were or should have been foreseeable. Students should contact the office as soon as possible in the term for which they are seeking accommodations. Student Disability Services is located in Kennesaw Hall, Room 1205 on the Kennesaw campus and Building A in Suite 160G on the Marietta campus. Please visit the [Student Disability Services \(SDS\) website](#) for more information, or call the office at 470-578-2666 (Kennesaw campus) or 470-578-7361 (Marietta campus).

KSU Enrollment Management/Course Attendance:

Students are solely responsible for managing their enrollment status in a class; nonattendance does not constitute a withdrawal.

Copyright Law:

It is the responsibility of KSU faculty and students to respect the rights of copyright holders and complying with copyright law. The University System of Georgia recognizes that the exclusive rights of copyright holders are balanced by limitations on those rights under federal copyright law, including the right to make a fair use of copyrighted materials and the right to perform or display works in the course of face-to-face teaching activities.

The University System of Georgia facilitates compliance with copyright law and, where appropriate, the exercise in good faith of full fair use rights by faculty and staff in teaching, research, and service activities. The University System of Georgia ensure compliance with copyright law in the following ways.

1. The USG informs and educates students, faculty, and staff about copyright law, including the limited exclusive rights of copyright holders as set forth in 17 U.S.C. § 106, the application of the four fair use factors in 17 U.S.C. § 107, and other copyright exceptions.
2. The USG develops and makes available tools and resources for faculty and staff to assist in determining copyright status and ownership and determining whether use of a work in a specific situation would be a fair use and, therefore, not an infringement under copyright law;
3. The USG facilitates use of materials currently licensed by the University System of Georgia and provides information on licensing of third-party materials by the University System; and
4. The USG identifies individuals at the University System and member institutions who can counsel faculty and staff regarding application of copyright law.

Protecting Students' Privacy (FERPA):

Students have certain rights to privacy. These rights are mandated by federal policy. [The Student Handbook](#) contains information regarding Rights Pertaining to Student Records, and FERPA specific details are available on the [KSU FERPA website](#).

A key requirement of the formal evaluation process is the protection of individual privacy rights concerning educational grading. The University's online learning system and email system is designed to prevent unauthorized individuals from

gaining access to sensitive information or information protected by federal or state law. Consequently, faculty and students are strongly encouraged to only communicate regarding course matters through the University's designated technology learning system.

Information should not be made public in any way in which a student's grades, social security number, or other personal information may be identified. Grade information may be shared with members of the KSU community who also have a legitimate educational interest in student success (e.g. academic advisors or members of the Behavioral Response Team). Faculty may be asked to provide early alert information if there is a concern that a student is at risk, academically or otherwise.

KSU Sexual Misconduct:

In accordance with federal and state law including, Title IX of the Education Amendments of 1972 ("Title IX") and Title VII of the Civil Rights Act of 1964 (Title VII), the University System of Georgia (USG), including Kennesaw State University, prohibits discrimination on the basis of sex in any of its education programs or activities or in employment. The USG is committed to ensuring the highest ethical conduct of the members of its community by promoting a safe learning and working environment. To that end, Kennesaw State University follows USG Board of Regents Policy Manual, Section 6.7. [Visit Title IX](#).

Withdrawal from Classes:

A student who officially withdraws from a course by the end of the last day to withdraw without academic penalty will receive a grade of "W" and receive no credit.

A student will receive a refund only when the student withdraws from ALL courses for the applicable semester and only by the schedule outlined in the University refund policy found in the Tuition, Expenses, & Financial Aid section of the undergraduate and graduate university catalogs.

Students should be aware that a reduction in their hours might result in the loss

of full-time student status and thus affect their financial aid, scholarships, athletic and ticket eligibility, University housing accommodations, use of University resources and access to University facilities, visa for international students, and Veterans Educational Benefits. Students should contact the appropriate office and their academic advisor with questions about the impact of their withdrawal from a course before initiating a withdrawal. Veterans and dependents of veterans who receive educational benefits must notify the Veterans Education Benefits Area in the Office of the Registrar of any course load reductions.

Hardship Withdrawals

If a student experiences significant personal hardship (e.g., medical or family emergency, prolonged illness), the Dean of Students can approve a hardship withdrawal from all courses in the term for which the student is currently registered. In the case of an approved hardship withdrawal from all courses, the Registrar will assign grades of “W” for those classes. The deadline for final approval of a hardship withdrawal by the Dean of Students is the last day of class for which the hardship withdrawal is sought. If the hardship withdrawal process is not complete by the last day of class for which the hardship withdrawal is sought, a student must appeal for a retroactive hardship withdrawal from the Academic Standing Committee.

Appeals for retroactive hardship withdrawals must be directed to the Academic Standing Committee. Retroactive hardship withdrawals are rarely granted if it has been more than one year since the last day of class for which the withdrawal is sought. Extraordinary justification must be shown. In the case of approved retroactive hardship withdrawals, the Registrar will assign a grade of “W.”

University Initiated Withdrawals

If a student is suspended by the Office of Student Conduct following a violation of the University’s Code of Conduct not related to academic dishonesty, the Office of Student Conduct may facilitate a University-initiated withdrawal from courses for which a student is registered for the term. The

Registrar will assign grades of “W” for those classes.

Military Withdrawals

A student will receive a “WM” symbol for all courses and a full refund of tuition and mandatory fees and a pro rata refund of other fees for military and other service, as defined by [BOR Policy Manual, Section 7.3.5.3](#). To request a military withdrawal, the student must submit a copy of official orders to the Office of the Registrar.

Academic Feedback:

Institutional Chief Academic Officers will encourage faculty to clarify for students, at the beginning of each course, the basis on which grades will be determined and to provide timely academic feedback as the course progresses ([BOR Academic and Student Handbook Policy 2.18](#))

Netiquette: Communication Courtesy:

All members of the class are expected to follow rules of common courtesy in all email messages, threaded discussions and chats. See [Email Best Practices](#) for additional guidance.

Course Delivery:

KSU may shift the method of course delivery at any time during the semester in compliance with University System of Georgia health and safety guidelines. In this case, alternate teaching modalities that may be adopted include hyflex, hybrid, synchronous online, or asynchronous online instruction. Please refer to the Instructional Continuity statement included in each course syllabus for specific plans.

Our class continuity plan includes:

Communication: Please check e-mail for necessary instructions.

Virtual Classes: If in-person classes are not possible, we may transition to

virtual classes using MS Teams.

Assignments and Assessments: Deadlines for assignments and assessments may be adjusted to accommodate the emergency situation.

We understand that emergencies create unique challenges. If you need additional support during an emergency, reach out via e-mail. The university also offers resources such as counseling and academic support, which can be accessed remotely.

General

- In this class, you are welcome to use generative “artificial intelligence” (hereafter “AI”) tools for any purpose other than taking exams. Generative AI is here to stay, so it is incumbent on all of us to learn to use it responsibly. **My bottom line: AI should be a supplement to your knowledge and skills, not a replacement for knowledge and skills.**
- All AI generative tools sometimes make up incorrect facts and fake citations, code generation models sometimes produce inaccurate outputs, and image/art generation tools can produce copied work or offensive products. You will be responsible for any inaccurate, biased, offensive, or otherwise unethical content you submit regardless of how it was created.
- If you use an AI tool on an assignment, you must explicitly describe its contribution in your submission. This includes a PDF of the entire transcript, including prompts and outputs. The use of an AI tool without acknowledgement is cheating and constitutes a violation of the KSU Code of Academic Integrity.

Special concerns for biologists

- Knowledge in biology, particularly taxonomic and phylogenetic nomenclature, is frequently updated in the literature and these changes may not be detected quickly or interpreted correctly by the AI. For example, some of the information presented in this course is based on studies published since 2021, which may or may not be in the corpus analyzed by the AI. So, you should always check the sources that AI gives you and compare to other sources.

Special concerns for researchers

- Do NOT ask any AI to provide you with data (i.e., actual numbers) for your research. There is a high probability that it will simply fabricate data.

Ask yourself: if AI is trained on pre-existing information, and you are conducting original research, where is the AI getting its data from? Instead, you might ask the AI for sources of data, or suggestions on how to collect data.

- If you use AI to help you generate R code, run and check the code yourself to verify that (1) the code works; and (2) your instructions were followed accurately. Just as a human colleague could misunderstand your instructions and write unhelpful code, so could an AI.
- Authorship on scientific products (manuscripts, posters, etc.) is a tricky subject in the best of times. Claiming authorship credit for text or material that was authored by AI is ethically dubious. Think of it this way: if you delegated the work to an employee, and then took sole credit for their work, would that be ethical? Make sure that you are responsible for any text or material that has your name attached to it.

University Sponsored Academic Resources

University Academic Resources:

- [Academic Tutoring Services](#)
- [Disability Resources](#)
- [Library](#)
- [Supplemental Instruction](#)
- [The Writing Center](#)
- [Virtual Smart Center](#)
- [Academic Advising](#)

Student Resources:

- [Student Support Links for Online Learning](#)
- [Student Success Resources](#)
- [Scholarships and Financial Aid](#)
- [Office of the Registrar](#)
- [Office of the Bursar](#)

Grade Appeals and Student Complaints:

KSU desires to resolve student grievances, complaints and concerns in an expeditious, fair and amicable manner. The [complaints and concerns webpage](#) was developed to assist current and prospective students in submitting complaints and appeals, and to direct them to the most effective venue for

accurate information and resolution. The resources on the page will direct students to the specific venue to appropriately address the related student complaint.

Complaints for online students are resolved following the same general procedures for students who attend classes on campus. However, for any process that requires a student appear in person, the university may make other arrangements. For processes that cannot be completed via telephone, email, or written correspondence, the university may set up a two-way video-conference site in place of a meeting on the KSU campus.

Technology Resources

For issues with technical difficulties, please contact the Student Help Desk:

[Submit a Request for Help](#)

Email: service@kennesaw.edu

Call: 470-578-6999

[New Students Technology Services](#)- Steps that will help you meet the technological requirements of the University.

Any request for make-ups due to technical issues **MUST** be accompanied by the ticket number received from UITs when the problem was reported to them. The ticket number will document the time and date of the problem. You **MUST** e-mail your instructor within 24 hours of the technical difficulty if you wish to request a make-up.

Student Support and Wellness Resources

YOU MATTER at KSU, and your well-being is a priority to us. College is exciting, but it can cause students to experience stress and feel overwhelmed. Through counseling, health education, addiction and recovery support, fitness and recreation activities, and access to basic needs, Wellbeing@KSU is here to help

you do well and be well.

- [Department of Career Planning & Development](#)
- [Student Health Clinic](#)
- [Military and Veteran Services](#)

Faculty Profile (USG CV Requirement):

Directory Information

Email: ngreen62@kennesaw.edu

Phone: 470-578-6546

Office: SC 331

Degrees Earned

BS in Biology, University of Louisville

PhD in Biology, Baylor University

Teaching Interests

My teaching is concentrated in two areas: vertebrate biology, and biological data analysis. One of my primary goals for all of my courses is to improve the quantitative and statistical reasoning skills of students. This often means introducing students to state-of-the-art methods in data collection and analysis, often far beyond what most biology majors might otherwise encounter in their undergraduate careers.

Research Interests

The [Green Quantitative Ecology Lab \(QuantEco\)](#) uses advanced mathematical and statistical tools to investigate relationships between living organisms and their environment. Most of our research focuses on understanding how human activities, like urbanization and climate change, affect fish and wildlife across all levels of biological organization.

While our research is often at the cutting-edge of quantitative methods, we are grounded in a rigorous tradition of field ecology and mammalogy. Our work takes us all over Georgia, from the northern Ridge and Valley to the barrier islands of the coast. To complement our computational and field work, we use a wide variety of lab methods like DNA extraction, ELISA, necropsy, craniometry, and microscopy gather the data we need from the samples we collect.

Some of our current projects are listed below and described in more detail on our [lab website](#). If you are interested in participating, please email Dr. Green (ngreen62@kennesaw.edu).

- Spatial ecology of small mammals in urbanizing environments
- Effects of climate change and urbanization on the Etowah watershed
- Osmoregulation in American Alligators
- Effects of climate change on marine food webs

Recent Scholarship

Where to find lab research

[Lab website](#)

[Google Scholar profile](#)

[ORCID profile](#)

Publications since joining KSU

Wildhaber ML, Albers JL, Green NS. 2025. Understanding predator-prey-competitor dynamics between Lower Missouri River *Macrhybopsis* and *Scaphirhynchus* using a combined population—bioenergetics model. *Ecological Modelling* 504: 111097. DOI: <https://doi.org/10.1016/j.ecolmodel.2025.111097>.

Anderson C, Weand M, Alexander H, Bretfeld M, Green NS. 2025. Variations in stand structure, composition, and fuelbeds drive prescribed fire behavior during mountain longleaf pine restoration. *Forest Ecology and Management* 575: 122372. DOI: <https://doi.org/10.1016/j.foreco.2024.122372>;

Hooper MJ, Struckhoff MA, Isanhart JP, Albers JL, Grabner KW, Green NS, Kunz BK, McDonald MV, West BM. 2024. Studies to assess natural resource recovery and evaluate monitoring methods for restored bottomland hardwood forests. *Integrated Environmental Assessment and Management*. DOI: <https://doi.org/10.1002/ieam.4996>;

West BM, Wildhaber ML, Green NS, Isanhart JP, McDonald MV, Hooper MJ. 2024. Survey effort and targeted landbird community metrics at Indiana lowland forest restoration sites. *Integrated Environmental Assessment and Management*. DOI: <https://doi.org/10.1002/ieam.4992>.

Wildhaber ML, West BM, Bennett KR, May JH, Albers JL, Green NS. 2024. Sicklefin Chub (*Macrhybopsis meeki*) and Sturgeon Chub (*M. gelida*) temporal and spatial patterns from extant population monitoring and habitat data spanning 23 years. *Fishes* 9: 43. DOI: <https://doi.org/10.3390/fishes9020043>.

Albers J, Wildhaber M, Green N, Struckhoff M, Hooper M. 2023. Visitor use and activities detected using trail cameras at forest restoration sites. *Ecological Restoration* 41: 199-212. DOI: <https://doi.org/10.3368/er.41.4.199>.

Green NS, Wildhaber ML, Albers JL. 2022. Interaction between transect design and animal distribution in distance sampling of deer. *Wildlife Society Bulletin* 46: e1368. DOI: <https://doi.org/10.1002/wsb.1368>.

Green NS, Li S, Maul JD, Overmyer J. 2022. Natural and anthropogenic factors and their interactions drive stream community integrity in a North American river basin at a large spatial scale. *Science of the Total Environment* 835, 155344. DOI: <https://doi.org/10.1016/j.scitotenv.2022.155344>.

Preston TM, Wildhaber ML, Green NS, Albers JL, Debenedetto GP. 2021. Enumerating white-tailed deer using unmanned aerial vehicles. *Wildlife Society Bulletin* 45: 97-108. DOI: <https://doi.org/10.1002/wsb.1149>

Green NS, Wildhaber ML, Albers JL. 2021. Effectiveness of a distance sampling from roads program for white-tailed deer in the National Capital Region Parks. Natural Resource Report NPS/NCR/NRR—2021/2224. U.S. National Park Service, Fort Collins, Colorado. DOI: <https://doi.org/10.36967/nrr-2284469>.

Green NS, Wildhaber ML, Albers JL, Pettit TW, Hooper MH. 2020. Efficient mammal biodiversity surveys for ecological restoration monitoring. *Integrated Environmental Assessment and Management*. DOI: <https://doi.org/10.1002/ieam.4324>.