

## HOLLY K. KINDSVATER, PH.D.

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### EDUCATION

- 2011 Ph.D. Ecology and Evolutionary Biology, Yale University (*advisor: Suzanne H. Alonzo*)
- 2008 M.S. Ecology and Evolutionary Biology, Yale University
- 2003 B.S. Marine Biology (Honors), University of California Santa Cruz

### PROFESSIONAL EXPERIENCE

- 2019- Assistant Professor, Fish and Wildlife Conservation, Virginia Tech
- 2016-2019 Assistant Research Professor, Ecology, Evolution, & Natural Resources, Rutgers University
- 2013-2015 NSF Postdoctoral Fellow in Math and Biology, Simon Fraser University / UCSC
- 2012-2013 Visiting postdoctoral scholar, University of British Columbia, Zoology
- 2012 Postdoctoral fellow, Yale University, Ecology and Evolutionary Biology

### FELLOWSHIPS AND AWARDS

- 2013 NSF Postdoctoral Research Fellowship in Math & Biology
- 2011 American Assoc. University Women Dissertation Fellowship (*declined due to early graduation*)
- 2005 STAR Fellowship; U.S. Environmental Protection Agency
- 2003 Dean's Award for Undergraduate Research (UC Santa Cruz)

### GRANTS

- 2022- Virginia Sea Grant (Congressional earmark): Improving summer flounder fisheries management in  
2023 a changing ocean. **HK Kindsvater**. \$300,000
- 2021- Norwegian Research Council: Computer vision to expand monitoring and accelerate assessment  
2024 of coastal fish. H Browman (Norwegian Institute of Marine Research; Lead PI), **HK Kindsvater**,  
and eight other investigators. *Total budget: \$1.37M Funds to VT: approximately \$50,000*
- 2021- Acorn Alcinda Foundation: Biodiversity survey of the vertebrate fauna of Kennedy Tree Farm.  
2023 **Kindsvater HK**, Hamed K. \$49,750
- 2020 - NSF-CNH2: Integrating cross-scale, socio-ecological feedbacks in freshwater fisheries.  
2025 L Castello (VT; Lead PI), E Brondizio (Indiana University; co-PI), **HK Kindsvater** (VT; co-PI).  
*Total budget: \$1.6M*
- 2020 - Virginia Tech Center for Coastal Studies Seed grant: Prevalence of microplastics in oyster  
2021 and water samples from Chesapeake Bay in Virginia. R Ovissipour (VT; Lead PI); L  
Castello (VT; co-PI); **HK Kindsvater** (VT; co-PI); \$15,000.
- 2020 - Virginia Tech Institute for Critical Technology and Applied Science: Understanding effects of  
2021 microplastics on fish health, growth and population ecology. **HK Kindsvater**  
(VT; Lead PI); R Ovissipour (VT; co-PI); L Castello (VT; co-PI); \$40,000.
- 2018 Shark Conservation Fund: Shark Traits: An Elasmobranch Life History Trait Database. \$25,000,  
**HK Kindsvater** (Rutgers; Lead PI), C Mull (Rutgers; co-PI).
- 2017 Career-Life Balance Supplement to NSF-DEB/NERC: Informing population models with  
evolutionary theory to infer species' conservation status: \$28,049, **HK Kindsvater**.

- 2016- NSF-DEB/NERC: Informing population models with evolutionary theory to infer species' conservation status. **HK Kindsvater** (Rutgers; Lead PI), M Mangel (UC Santa Cruz; co-PI), J Matthiopoulos (University of Glasgow; co-PI). *Total budget: \$1.55M My share: \$749,433*
- 2009 NSF Doctoral Dissertation Improvement Grant. \$14,967 SH Alonzo (Yale University; Lead PI), H Kindsvater (Yale University; co-PI)

## PEER-REVIEWED JOURNAL PUBLICATIONS

†GRADUATE STUDENT ‡UNDERGRADUATE STUDENT

36. †Conrad, H.M. and **Kindsvater, H.K.** 2024. Modelling consequences of climate-driven sex reversal for southern and summer flounder population dynamics. *Marine and Coastal Fisheries*. **16(2)**: e10289
35. Draghi, J.A., McGlothlin, J., **Kindsvater, H.K.** 2024. Demographic feedbacks during evolutionary rescue can slow or speed adaptive evolution. *Proc. Roy. Soc. B*. **291**: 20231553
34. **Kindsvater, H.K.**, Juan-Jordá, M.J., Dulvy, N.K., Horswill, C.M., Matthiopoulos, J.M., and Mangel, M. 2024. Size-dependence of food intake and mortality interact with temperature and seasonality to drive diversity in fish life histories. *Evolutionary Applications*. **17**:e13646
33. Brooks, G.C., Hopkins W., and **Kindsvater, H.K.** 2024. Concurrent threats and extinction risk in a long-lived, highly fecund vertebrate. *Ecological Applications*. e2946
32. Hopkins W, Case C, Groffen J, Brooks GC, Jachowski CMB, Button ST, Halligan JJ, O'Brien, RSM, **Kindsvater HK**. 2023. Filial cannibalism leads to chronic nest failure of eastern hellbender salamanders at sites with low upstream forest cover. *The American Naturalist*. **202(1)**, 92-106
31. Pacoureau N, Carlson JK, **Kindsvater HK**, Rigby CL, Winker H, Simpfendorfer C.A., Charvet P, Pollom RA, Barreto R, Sherman CS, Talwar BS, Skerritt DJ, Sumaila UR, Matsushiba JH, VanderWright WJ, Yan HF, Dulvy NK. 2023. Conservation successes and challenges for wide-ranging sharks and rays. *Proc. Nat. Acad. Sci.* 120 (5) e2216891120 doi: 10.1073/pnas.2216891120
30. Mull C, Pacoureau N, Pardo SA, Saldaña Ruiz L, Garcia Rodriguez E, Finucci B, Haack M, Harry A, Judah A, VanderWright W, Yin JS, **Kindsvater HK**, Dulvy NK. 2022. Sharkipedia: A curated open access database of shark and ray life history traits and abundance time-series. *Sci Data* **9**, 559 doi: 10.1038/s41597-022-01655-1
29. Chong-Montenegro CM and **Kindsvater HK**. 2022. Demographic consequences of small-scale fisheries for two sex-changing groupers of the Tropical Eastern Pacific. *Front. Ecol. Evol.* doi: 10.3389/fevo.2022.850006
28. Fark SN, Gerber S, Alonzo SH, **Kindsvater HK**, Meier JI, Seehausen O. 2022. Multispecies colour polymorphisms associated with contrasting microhabitats in two Mediterranean wrasse radiations. *J. Evol. Biol.* 35: 633-647 doi: 10.1111/jeb.13999
27. Brooks GC and **Kindsvater, HK**. 2022. Early development drives variation in amphibian vulnerability to global change. *Front. Ecol. Evol.* doi: 10.3389/fevo.2022.813414
26. Albecker MA, Wilkins LGE, Krueger-Hadfield S, Bashevkin SM, Hahn MW, Hare MP, **Kindsvater HK**, Sewell MA, Lotterhos KE, Reitzel AM. 2021. Does a complex life cycle affect adaptation to environmental change? Genome-informed insights for characterizing selection across complex life cycle? *Proc. R. Soc. B* 288: 20212122. doi: 10.1098/rspb.2021.21
25. Alonzo SH, Stiver KA, **Kindsvater HK**, Marsh-Rollo SM, Nugent B, Kazancioglu E. 2021. Ejaculate allocation and sperm characteristics differ among alternative male types in a species of fish with cooperation and competition among unrelated males. *Cells*. **10**: 2612 doi: 10.3390/cells10102612
24. Pacoureau N, Rigby C, Kyne PM, Sherley RB, Winker H, Barreto R, Carlson JK, Fernando D, Francis MP, Jabado RW, Fordham SV, Herman KB, Liu KM, Marshall AD, Pollom RA, Romanov EV, Simpfendorfer CA, Yin JS, **Kindsvater HK**, & Dulvy NK. 2021. Half a century of global decline in sharks and rays. *Nature*. **589**: 567–571 doi: 10.1038/s41586-020-03173-9

23. Oke KB, Cunningham CJ, Westley PAH, Baskett ML, Carlson SM, Clark J, Hendry AP, Karatayev VA, Kendall NW, Kibele J, **Kindsvater HK**, Kobayashi KM, Lewis B, Munch S, Reynolds JD, Vick GK, & Palkovacs EP. 2020. Consistency, causes, and consequences of body size declines in Pacific salmon. *Nat Commun.* **11**: 4155 doi: 10.1038/s41467-020-17726-z
22. **Kindsvater HK**, Halvorsen KT, Sordalen TK, Alonzo SH. 2020. The consequences of size-selective fishing mortality for larval production and sustainable yield in species with parental care. *Fish and Fisheries.* **21**: 1135-1149
21. Walsh J, Pendray J, Godwin S, Artelle K, **Kindsvater HK**, Field R, Harding J, Swain N, Reynolds J. 2020. Relationships between Pacific salmon and aquatic and terrestrial ecosystems: a quantitative review. *Ecology* 101: e03060
20. Sherley R, Winker H, Rigby C, Kyne P, Pollom R, Pacoureaux N, Herman K, Carlson J, Yin J, **Kindsvater HK**, Dulvy NK. 2020. Estimating IUCN Red List population reduction: JARA – a decision-support tool applied to pelagic sharks. *Conservation Letters.* 2020; 13:e12688 doi: 10.1111/conl.12688
19. Horswill C, **Kindsvater HK**, Juan-Jordá MJ, Dulvy NK, Mangel M, Matthiopoulos J. 2019. Global reconstruction of life-history strategies for data-limited tuna populations. *J Appl. Ecol.* 2019, 1-11
18. Stiver KA, **Kindsvater HK**, Tamburello N, Heckman KL, Klein J, Alonzo SH. 2018. Intentional multiple mating by females in a species where sneak fertilization circumvents female choice for parental males. *J. Fish Biol.* **93**, 324–333
17. **Kindsvater HK**, Dulvy NK, Horswill C, Juan-Jordá MJ, Mangel M, Matthiopoulos J. 2018. Overcoming the data crisis in biodiversity conservation. *Trends Ecol. Evol.* **33**, 676-688
16. **Kindsvater HK**, Palkovacs E. 2017. Predicting eco-evolutionary impacts of fishing on body size and trophic role of Atlantic cod. *Copeia.* **105**, 475-482
15. **Kindsvater HK**, Reynolds JD, Sadovy de Mitcheson YJ, Mangel M. 2017. Selectivity matters: rules of thumb for management of plate-sized, sex-changing fish in the live reef food fish trade. *Fish and Fisheries.* **18**, 821-836
14. **Kindsvater HK**, Mangel M, Reynolds JD, & Dulvy NK. 2016. Ten principles from evolutionary ecology essential for effective marine conservation. *Ecol Evol.* **6**, 2125–2138\*  
\* Recommended by Faculty of 1000
13. Pardo SA, **Kindsvater HK**, Cuevas-Zimbrón E, Sosa-Nishizaki O, Pérez-Jiménez JC, & Dulvy NK. 2016. Growth, mortality, and relative extinction risk of a data-sparse devil ray. *Scientific Reports.* **6**, 33745
12. Pardo SA, **Kindsvater HK**, Reynolds JD, & Dulvy NK. 2016. Maximum intrinsic rate of population increase in sharks, rays, and chimaeras: the importance of survival to maturity. *Can. J. Fish. Aq. Sci.* **73**, 1159-1163
11. Weir L, **Kindsvater HK**, Young KA, & Reynolds JD. 2016. Sneaker males influence sexual size dimorphism in anadromous salmon. *American Naturalist.* **188**, 264-271
10. **Kindsvater HK**, Braun D, Otto SP, & Reynolds JD. 2016. Costs of reproduction explain the correlated evolution of semelparity and egg size: theory and a test with salmon. *Ecology Letters* **19**, 687-6969
9. Paczolt K, Passow C, Declos P, **Kindsvater HK**, Jones A, & Rosenthal GG. 2015. Multiple mating and reproductive skew in pure and introgressed females of the live-bearing fish *Xiphophorus birchmanni*. *J. Heredity* **106**, 57-66
8. **Kindsvater HK** & Otto SP. 2014. The evolution of egg size in stage-structured populations. *American Naturalist* **184**, 143-155
7. **Kindsvater HK** & Alonzo SH. 2014. Females allocate differentially to offspring size and number in response to male effects on female and offspring fitness. *Proc. R. Soc. B* **281**, 20131981†  
† Covered by the Canadian Press, Huffington Post, and the Vancouver Sun
6. **Kindsvater HK** & Alonzo SH. 2013. Short-term dynamics of territory occupancy in an allopaternal species, the tessellated darter *Etheostoma olmstedi*. *J. Fish Biol.* **82**, 1398–1402

5. **Kindsvater HK**, Simpson SE, Rosenthal GG, & Alonzo SH. 2013. Male diet, female experience, and female size influence maternal investment in swordtails. *Behav. Ecol.* **24**, 691-697
4. **Kindsvater HK**, Rosenthal GG, & Alonzo SH. 2012. Maternal size and age shape offspring size in a live-bearing fish, *Xiphophorus birchmanni*. *PLoS ONE* **7**(11), e48473
3. **Kindsvater HK**, Bonsall MB, & Alonzo SH. 2011. Mortality associated with reproduction could explain variation in offspring size and number *J. Evol. Biol.* **24**, 2230–2240
2. **Kindsvater HK**, Alonzo SH, Mangel M, & Bonsall MB. 2010. Effects of age- and state-dependent allocation on offspring size and number. *Evol. Ecol. Res.* **12**, 327-346
1. Mangel M, **Kindsvater HK**, & Bonsall MB. 2007. Evolutionary analysis of life span, competition, and adaptive radiation, motivated by the Pacific rockfishes (*Sebastes*). *Evolution* **61**, 1204-1224

### INVITED PERSPECTIVES AND BOOK CHAPTERS

- Kindsvater HK**, Pacoureaux N, Dulvy NK. 2021. Overfishing endangers oceanic sharks and rays. *ScienceBreaker* [Invited Perspective]. <https://doi.org/10.25250/thescbr.brk566>
- Dulvy NK, **Kindsvater HK**. 2017. The Future Species of Anthropocene Seas. *Conservation for the Anthropocene Ocean*, P Levin & M Coe (Eds). [Book Chapter, peer-reviewed]
- Dulvy NK & **Kindsvater HK**. 2015. Recovering the potential of coral reefs. *Nature*. **520**, 304-305 [Invited Perspective]
- Alonzo SH & **Kindsvater HK**. 2008. Life History Patterns. *General Ecology*. Vol. 3 *Encyclopedia of Ecology*, SE Jorgensen & BD Fath (Eds) pp. 2175-2180 Elsevier, Oxford UK [Book Chapter]

### OTHER PUBLICATIONS

- ‡Hamel EM, †Roethler MG, †Tremewan C, Kindsvater HK. Can the Size of a Fish Mother Determine the Size of Her Offspring? *Frontiers for Young Minds*. 2022.

### MANUSCRIPTS IN REVIEW

- Brooks, G., Uyeda, J., Bone, N., †Conrad, H., Mull, C. and Kindsvater, H., 2024. Fundamental constraints on the evolution of vertebrate life histories.
- †Theberge K, Sordalen TK, Pugh TA, and **Kindsvater HK**. In review. Assessing the effects of female protections on size structure and spawning potential in two clawed lobster fisheries subject to varying exploitation. *Fisheries Research*.
- †Holguin C, †Hilt M, Caruso NM, and **Kindsvater HK**. Submitted. Interacting effects of temperature and food on early growth of two plethodontid salamanders.

### INVITED NATIONAL AND INTERNATIONAL PRESENTATIONS

- 2023 School for Marine Sciences & Technology, University of Massachusetts Dartmouth. *Information from adaptation: how species' life histories help or undermine sustainable fisheries management*
- 2022 Institute of Marine Research, Flødivigen, Norway. *Using species' traits to conserve and manage fish and fisheries*
- 2021 Center for the Advancement of Population Assessment Methodology at NOAA NWFSC and University of Washington. Keynote speaker: *Life history diversity, natural mortality, and fisheries reference points*. (postponed in 2020)
- 2021 UC Berkeley. *Evolutionary perspectives on the vulnerability of marine species to overfishing*.
- 2019 University of Houston. *Information from adaptation: How species' life histories help them cope with the Anthropocene*
- 2018 Virginia Tech. *Using species' traits to conserve and manage fish and fisheries*
- 2018 Rutgers University. *Information from adaptation: how species' life histories help them cope with the Anthropocene*

- 2018 UC Santa Barbara. *Fisheries, natural selection and life history.*
- 2018 UC Davis. *Information from adaptation: life history, natural selection, and fishing.*
- 2018 UC Santa Cruz. *Information from adaptation: Using life history to infer natural selection.*
- 2016 Northeastern University. *The ecology of marine life histories: Anadromy, hermaphroditism, and global change.*
- 2016 Stony Brook University. *The ecology of marine life histories.*
- 2016 Larval Fish Conference, Am. Fisheries. Soc. Early Life History section, Solomons, MD *When smaller is better: do females decrease offspring size to improve their own chances of survival?*
- 2016 University of Sheffield, UK *Linking models of reproductive allocation to population dynamics of marine species.*
- 2016 Southern Connecticut State University. *Linking reproductive behavior to population dynamics in fishes.*
- 2015 University of Michigan. *From demography to diversity in fishes.*
- 2015 Florida State University. *The ecology and evolution of life histories in the sea.*
- 2015 NOAA Northwest Fisheries Science Center, Seattle. *The ecology of marine life history evolution: Anadromy, hermaphroditism, and global change.*
- 2014 University of Alaska Anchorage. *The ecology and evolution of life histories in the sea.*
- 2014 University of British Columbia, BC, Canada. *Life histories in the sea.*
- 2013 Simon Fraser University, BC, Canada. *Understanding complexity in life-history evolution. Or, what to do when your fish doesn't fit the theory.*
- 2013 EAWAG Centre for Aquatic Research, Lucerne, Switzerland. *Combining theory and data to understand life-history traits and population dynamics.*

## CONTRIBUTED PRESENTATIONS

†GRADUATE STUDENT ‡UNDERGRADUATE STUDENT

- 2024 †Hultin EA, Brooks G, **Kindsvater HK**, and Castello L. *Contributed talk.* Predicting *Arapaima gigas* Population Dynamics From Social and Ecological Variables. World Fisheries Congress. Seattle, WA
- 2023 †Theberge K, Sordalen, TK, Pugh TA, and **Kindsvater HK**. *Contributed talk.* Assessing the effects of female protections on size structure and spawning potential in two clawed lobster fisheries subject to varying exploitation. 12th International Conference and Workshop on Lobster Biology and Management, Perth, Australia.
- 2024 †Conrad HM, and **Kindsvater HK**. Examining spatial heterogeneity in the summer flounder sex ratio using fishery-independent data. Southern Division of the American Fisheries Society, Chattanooga, TN.
- 2024 †Hultin EA, Brooks G, **Kindsvater HK**, and Castello L. *Contributed poster.* Identifying drivers of *Arapaima* population dynamics in a floodplain ecosystem. Southern Division of the American Fisheries Society, Chattanooga, TN.
- 2023 Brooks G, Hopkins W, and **Kindsvater, HK**. *Contributed talk.* Concurrent Threats Jeopardize the Viability of Virginia's Hellbender Populations. Joint Meeting of Ichthyologists and Herpetologists. Norfolk, VA
- 2023 †Conrad HM, and **Kindsvater HK**. *Contributed poster.* Latitudinal differences in summer flounder sex ratio: possible evidence for temperature-induced sex-reversal. Joint Meeting of Ichthyologists and Herpetologists. Norfolk, VA
- 2023 †Holguin C, Caruso NM, and **Kindsvater HK**. *Contributed talk.* Interacting effects of temperature and food on early growth of two plethodontid salamanders. Joint Meeting of Ichthyologists and Herpetologists. Norfolk, VA
- 2023 **Kindsvater HK**. *Contributed talk.* The physiological and ecological drivers of diversity in tuna life histories. Joint Meeting of Ichthyologists and Herpetologists. Norfolk, VA
- 2023 **Kindsvater HK** and Mangel M. *Contributed talk.* Fear and foraging drive diversity fish life histories. American Society of Naturalists/Evolution joint meeting; Albuquerque, New Mexico

- 2023 Draghi JA, McGlothlin JW, and **Kindsvater HK**. *Contributed talk*. Demographic feedbacks during evolutionary rescue can slow or speed adaptive evolution. American Society of Naturalists/Evolution joint meeting; Albuquerque, New Mexico
- 2022 †Conrad HM and **Kindsvater HK**. *Contributed talk*. Modelling consequences of climate-driven sex reversal for Southern and Summer Flounder population dynamics 17<sup>th</sup> Annual NOAA Flatfish Biology Conference, Westbrook, CT. 2022.
- 2022 †Holguin C, Caruso NM, and **Kindsvater HK**. *Contributed poster*. Investigating the temperature-size rule in *Eurycea cirrigera*. Northeast Partners in Amphibian and Reptile Conservation.
- 2022 †Holguin C, Caruso NM, and **Kindsvater HK**. *Contributed poster*. Investigating the temperature-size rule in *Eurycea cirrigera*. American Society of Ichthyologists and Herpetologists. Spokane, WA
- 2022 †Conrad HM and **Kindsvater HK**. *Contributed talk*. How egg production in summer flounder is affected by sex ratio. Tidewater Chapter meeting of the American Fisheries Society, NC
- 2022 †Theberge K and **Kindsvater HK**. *Contributed flash talk*. How fishing affects American lobster mating and reproduction. Tidewater Chapter meeting of the American Fisheries Society, NC
- 2021 †Conrad HM and **Kindsvater HK**. *Contributed poster*. Modelling how changes in the sex ratio at recruitment impact Spawning Potential Ratio in summer flounder. National meeting of the American Fisheries Society; Baltimore, MD.
- 2021 **Kindsvater HK** and Mangel M. *Contributed talk*. In an ecosystem size spectrum, fear and foraging determine fish life histories. AFS meeting; delivered remotely in November 2021.
- 2021 **Kindsvater HK**. *Contributed talk*. Body sizes of tunas are predicted by state-dependent life-history theory within an ecosystem context. ICES meeting; delivered remotely in September 2021 after postponement in 2020.
- 2021 **Kindsvater HK**. *Invited talk*. Developing informative priors on demographic rates to predict the vulnerability of marine species to overfishing. Statistics Colloquium, Virginia Tech
- 2020 **Kindsvater HK**, Halvorsen KT, Sordalen TK, Alonzo SH. *Contributed talk*. The consequences of size-selective fishing mortality for larval production and sustainable yield in species with obligate male care. Virginia and Virginia Tech AFS joint chapter meeting, Lexington, VA.
- 2019 **Kindsvater HK**. *Invited talk*. Using evolutionary theory to inform joint priors on demographic rates of rare marine pelagic fish. MathBio Interdepartmental Seminar Series, Virginia Tech
- 2019 Oke KB, Cunningham C, **Kindsvater HK** and 15 other working group members. *Contributed talk*. Canadian Society of Ecology and Evolution, Fredericton, NB, Canada.
- 2019 Mull C, Pardo S, Harry A, Saldaña Ruiz L, Garcia Rodriguez E, Finucci B, Bird C, Rigby C, Dureuil M, Dulvy NK, **Kindsvater HK**. *Contributed talk*. SharkTraits: A curated open-access database of shark, ray, and chimaera life-history traits. American Elasmobranch Society, Snowbird, UT.
- 2018 Oken, K, **Kindsvater HK**, Provost M, and Jensen, OP. *Contributed talk*. Accounting for Sex Change in the Estimation of Black Sea Bass Life History Traits. American Fisheries Society, Atlantic City, NJ.
- 2018 **Kindsvater HK**, Mangel M. *Contributed talk*. Linking individual behavior to macro-evolutionary life-history divergence in tunas. American Society of Naturalists, Asilomar, CA
- 2016 **Kindsvater HK**. *Contributed talk*. Life-history traits, population dynamics, and species' ability to cope with change. Joint Meeting of Ichthyologists and Herpetologists, New Orleans, LA.
- 2014 **Kindsvater HK**, Reynolds JD, Mangel M. *Contributed talk*. Modeling resilience and extinction risk in sex- changing fishes: how much information do we need to conserve data-poor groupers? Int'l Marine Conservation Congress, Glasgow, Scotland.
- 2014 **Kindsvater HK**, Otto SP, Braun D, Reynolds JD. *Contributed talk*. The evolution of semelparity and egg size. American Society of Naturalists, Asilomar, CA.
- 2014 **Kindsvater HK**, Otto SP. *Contributed talk*. The evolution of maternal effects on egg size. ASN/Evolution joint meeting, Raleigh, NC.
- 2010 **Kindsvater HK**, Alonzo SH, Rosenthal, GG. *Contributed talk*. Does age matter? Effects of age on size (and number) in swordtails. ASN/Evolution joint meeting, Portland, OR.
- 2008 **Kindsvater HK**, Bonsall MB, and Alonzo SH. *Contributed talk*. Age, risk, and maternal

- investment. American Fisheries Society national meeting, Ottawa, Ontario, Canada.
- 2006 **Kindsvater HK**. *Contributed poster*. The evolution of age-specific maternal investment. SSE annual meeting, Stony Brook University, NY.
- 2006 **Kindsvater HK**, Bonsall MB, and Mangel M. *Contributed poster*. Correlates of lifespan in *Sebastes* (Pacific rockfishes). Mote Marine Lab meeting. Theme: Life History and Fisheries. Sarasota, FL.
- 2006 **Kindsvater HK**, Bonsall MB, and Mangel M. *Contributed talk*. Correlates of lifespan in *Sebastes* (Pacific rockfishes). Society for Integrative and Comparative Biology meeting, Orlando, FL.
- 2005 **Kindsvater HK**, Bonsall MB, and Mangel M. *Contributed talk*. Correlates of lifespan in *Sebastes* (Pacific rockfishes). Ecological Society of America annual meeting, Montreal, Quebec, Canada.

## UNDERGRADUATE MENTEE PRESENTATIONS

- 2024 ‡Quinones J, †Conrad HM, and **Kindsvater HK**. *Contributed poster*. Assessing the accuracy of gonadosomatic index (GSI) staging for maturity and age at first maturity in summer flounder, *Paralichthys dentatus*. Southern Division of the American Fisheries Society, Chattanooga, TN.
- 2023 ‡Hilt, M, †Holguin C, Hamed K and **Kindsvater HK**. *Contributed poster*. Examining phenotypic plasticity in thermal acclimation of metabolic rate in *Plethodon cinereus*. Southeast Partners in Amphibian and Reptile Conservation, Black Mountain, NC
- 2022 ‡Coan J, †Holguin C, Caruso NM, Hamed K and **Kindsvater HK**. *Contributed poster*. Investigating the eastern distribution of the green salamander, *Aneides aeneus*. Virginia Tech Summer Undergraduate Research Symposium., Blacksburg, VA.
- 2022 ‡Ferguson N, ‡Davis KJ, **Kindsvater HK** and Hamed K. *Poster*. Predicting population growth of an introduced minnow species *Chrosomus oreas* threatening the state endangered *Chrosomus tennesseensis*, Dennis Dean Undergraduate research conference. Blacksburg, VA.
- 2022 ‡Fitzpatrick, T, †Conrad HM† and **Kindsvater HK**. *Poster*. Relationship between total length and gonad mass in summer flounder (*Paralichthys dentatus*). Dept. of Fish and Wildlife Conservation Undergrad Research Conference.
- 2022 ‡Stephenson, T, ‡Davis K, ‡Ferguson N, Peoples B, Buckwalter J, **Kindsvater HK**, and Frimpong, E. Fish community dynamics over 13 years in Blacksburg's Toms Creek. Dept. of Fish and Wildlife Conservation Undergrad Research Conference.
- 2022 ‡Burgess M, †Conrad HM and **Kindsvater HK**. *Contributed poster*. Analyzing spatial trends and sex ratios in range shifts of summer flounder, *Paralichthys dentatus*. Tidewater Chapter meeting of the American Fisheries Society, NC
- 2021 ‡Leiah Johnson, **Kindsvater HK**. *Virtual presentation*. Life history and vulnerability of Atlantic sturgeon *Acipenser oxyrinchus* populations across its range. MAOP Summer REU Conference.
- 2011 ‡Passow CP, **Kindsvater HK**, Paczolt K, Rosenthal GG. *Poster. Contributed poster*. Multiple mating in the livebearing fish *Xiphophorus birchmanni*. Society for the Study of Evolution Annual Meeting, Norman, OK.
- 2011 ‡Simpson SE, **Kindsvater HK**, Rosenthal, GG. *Contributed poster*. Swordtail mate choice and reproductive allocation: effects of male condition. Society for the Study of Evolution Annual Meeting, Norman, OK.
- 2010 ‡Ochoa O, Rosenthal GG, **Kindsvater HK**. *Contributed poster*. Differential allometry of testes size among different male mating tactics. Society for the Study of Evolution Annual Meeting, Norman, OK.

## STUDENT AND POSTDOC MENTORSHIP

### GRADUATE STUDENTS

- 2022 - Emma Hultin, PhD student, Virginia Tech FWC. Co-chaired with Leandro Castello.
- 2020 - Hailey Conrad, MS student, Virginia Tech FWC, 2022-2025 National Science Foundation Graduate Fellowship

2020 - Charlie Holguin, MS student, Virginia Tech FWC, 2020-2021 Dean's Diversity Assistantship  
 2020 – Kaitlyn Theberge, MS student, Virginia Tech FWC, 2023 NOAA Sea Grant Knauss Fellow  
 2022

#### POSTDOCTORAL SCHOLARS

2021-2022 Nathan Pacoureau  
 2020- George Brooks  
 2019 Christopher Mull

#### UNDERGRADUATE STUDENTS

2023 Julian Quinones (Virginia Tech FWC '23)  
 2021- Catharine Carrion (Virginia Tech FWC' 24) Julia Coan (Virginia Tech FWC '23), Corinne Duffy  
 2022 (Virginia Tech FWC '23), Nathan Ferguson (Virginia Tech FWC '23)  
 2021 Multicultural Academic Opportunities Program REU: Leah Johnson (Hollins University)  
 2020- Ty Stephenson (Virginia Tech FWC '22), D. Shane Allen (Virginia Tech FWC '21), Sam Van Noy  
 2021 (Virginia Tech FWC '21), Tom Fitzpatrick 2021 (Virginia Tech FWC '23), Joseph Nichols (Virginia  
 Tech FWC '23), Madeline Burgess (Virginia Tech FWC '22), Kalin Davis (Virginia Tech FWC '23),  
 Miriam Hilt (Virginia Tech FWC '24).  
 2019 Swati Modwadhia (Rutgers DEENR '21)  
 2010 Undergraduate thesis students – Courtney Passow and Suzanne Simpson (TAMU '11)

#### GRADUATE COMMITTEE MEMBERSHIP

Kyle Grundy (Virginia Tech FWC), (Gabriel Borba (Virginia Tech FWC), Josephine Oakley (Virginia Tech  
 FWC 2024), Tori Engler (Virginia Tech FWC 2024), Emma Hultin (Virginia Tech FWC 2022), Nic Bone  
 (Virginia Tech Biological Sciences), Katrina Catalano (Rutgers DEENR 2022), Rene Clark (Rutgers  
 DEENR 2023), Sarah Borsetti (Rutgers Dept. of Marine and Coastal Science 2021)

External member – Frieda Benun (CUNY Brooklyn College Biology 2020)

## TEACHING

#### INSTRUCTOR OF RECORD

2023 Population Dynamics and Estimation - FIW 4414, Virginia Tech  
 2022 Population Dynamics and Estimation - FIW 4414, Virginia Tech  
 2022 Research Design in Social and Ecological Science – FIW 5984, Virginia Tech (co-taught)  
 2022 Principles of Fish & Wildlife Conservation - FIW 2114, Virginia Tech (co-taught)  
 2021 Population Dynamics and Estimation - FIW 4414, Virginia Tech  
 2021 Marine and Freshwater Conservation Seminar - FIW 6004, Virginia Tech  
 2020 Population Dynamics and Estimation - FIW 4414, Virginia Tech  
 2020 Principles of Fish & Wildlife Conservation FIW 2114 (co-taught, Fall), Virginia Tech  
 2020 Principles of Fish & Wildlife Conservation FIW 2114 (co-taught, Spring), Virginia Tech  
 2013 Science and Sustainability, University of British Columbia

#### GUEST LECTURES

2024 Bioinformatics BIOL 4824/5824 *Trait based estimates of extinction risk*  
 2023 Interfaces of Global Change 2nd Year Seminar, *The Science-Policy Interface*  
 2022 Interfaces of Global Change 2nd Year Seminar, *The Science-Policy Interface*  
 2021 Conservation and the Environment, ICESI University, Cali, Colombia  
 2021 Fisheries Management and Conservation, FIW 4714 Virginia Tech



- 2021 Interfaces of Global Change 1st Year Seminar, GRAD 5134 *Freshwater fisheries & Environmental Justice*
- 2020 Fisheries Management and Conservation, FIW 4714 Virginia Tech (2 lectures)
- 2020 Marine Ecology, FIW 4624 Virginia Tech
- 2016 Marine Conservation Ecology, Columbia University
- 2011 Animal Behavior, Yale University

#### WORKSHOP INSTRUCTION

- 2019 Importing and Cleaning Data in R and the Tidyverse, Rutgers University
- 2015 Introduction to Linear Mixed-Effects Models in R, Simon Fraser University
- 2014 Introduction to Statistics in R, Simon Fraser University

#### GRADUATE TEACHING EXPERIENCE

- 2011 TA: Reproduction and Development lab, Yale University
- 2009 TA: Diversity of Life, Yale University
- 2008 TA: Diversity of Life lab, Yale University
- 2008 TA: Ecology, Evolution, and Behavior, Yale University
- 2007 TA: Ecology, Evolution, and Behavior, Yale University

#### PEDAGOGICAL AND PROFESSIONAL DEVELOPMENT

- 2024 Inclusive VT – Building an inclusive classroom pathway
- 2021 Center for Excellence in Teaching and Learning - Assessment (2 development credits)
- 2020 Center for Excellence in Teaching and Learning - Course design clinic (12 development credits)
- 2020 Inclusive VT - Summer diversity summit (2 credits)

#### WORKING GROUPS

- 2019- NSF-RCN Evolving Seas (Invited participant, remote)
- 2020
- 2017- NCEAS - State of Alaska's Salmon and People working group: Consistency, causes, and
- 2018 consequences of declining size and age of Alaskan salmon (Invited participant, 3 meetings)

#### SERVICE TO THE SCIENTIFIC COMMUNITY

2021-2023 Associate Editor, *The American Naturalist*

I have reviewed more than 70 manuscripts for 38 different journals, including *The American Naturalist*, *Aquaculture Research*, *Aquatic Living Resources*, *Behavioral Ecology*, *Bioessays*, *Biological Conservation*, *Biological Reviews*, *Biology Letters*, *Conservation Biology*, *Conservation Letters*, *Conservation Physiology*, *Coral Reefs*, *Ecological Applications*, *Ecology*, *Ecology Letters*, *Ecosphere*, *Entomologia Experimentalis et Applicata*, *Evolution*, *Evolutionary Applications*, *Evolutionary Ecology Research*, *Fish and Fisheries*, *Fisheries Research*, *Fishery Bulletin*, *Functional Ecology*, *ICES Journal of Marine Science*, *Journal of Animal Ecology*, *Journal of Evolutionary Biology*, *Journal of Fish Biology*, *Journal of Theoretical Biology*, *Marine Ecology Progress Series*, *Methods in Ecology and Evolution*, *Nature Communications*, *Naturwissenschaften*, *Oecologia*, *Oikos*, *PLoS ONE*, *Proceedings of the Royal Society Series B*, *Reviews in Fish Biology and Fisheries*, *Theoretical Ecology*

#### GRANT PROPOSAL REVIEWS

Panelist: NSF-DEB (two panels since 2016)

AD HOC PROPOSAL REVIEWS (2016-PRESENT)

National Science Foundation – Division of Environmental Biology (BIO directorate)  
 National Science Foundation – Division of Ocean Sciences (GEO directorate)  
 Oregon Sea Grant  
 UK Research and Innovation - Biotechnology and Biological Sciences Research Council Discovery Fellowship  
 Virginia Tech - Tech Institute for Critical Technology and Applied Science

BOOK PROPOSAL REVIEW  
 Oxford University Press (2018)

### **DEPARTMENT AND UNIVERSITY SERVICE AT VIRGINIA TECH**

2023 Alternate Senate representative from CNRE on University Council  
 2022 Graduate Student Living Wage Committee, Dept. of Fish & Wildlife Conservation  
 2021- Alternate member of Virginia Tech Faculty Senate from the Dept. of Fish & Wildlife Conservation  
 PRESENT (serving as sabbatical replacement in 2022-2023)  
 2021- Undergraduate Affairs Committee, Dept. of Fish & Wildlife Conservation  
 PRESENT  
 2021 Department Search Committee, Freshwater Fish Ecology, Dept. of Fish & Wildlife Conservation  
 2021- Fisheries curriculum review committee, Dept. of Fish & Wildlife Conservation  
 PRESENT  
 2021 Faculty mentor, Virginia Tech Chapter, American Fisheries Society  
 2021 Interfaces of Global Change IGEP Curriculum committee member and co-instructor of three graduate seminars  
 2021 Panel member, American Fisheries Society Hutton Scholars Summit Conservation Careers Panel  
 2021 Judge, Interfaces of Global Change IGEP Graduate Research Symposium Flash Talks  
  
 2020- Panel member, VT Graduate course “GRFP Prep”, CRN 81632, Instructor, M.C. Mims, 16  
 2021 students.  
 2020 Steering Committee for the Community of Practice for Large Courses with the Center for Excellence in Teaching and Learning, Virginia Tech  
 2020 Panel moderator for *Educational Opportunities Beyond Undergraduate Degrees*, panel organized by the Virginia Tech Graduate School Office of Recruitment, Diversity, and Inclusion  
 2019 Department search committee, Mammal Ecology, Dept. of Fish & Wildlife Conservation  
 2019 – Undergraduate Majors Fair – Fish Conservation faculty representative  
 2021

### **MENTORSHIP, OUTREACH AND SCIENCE COMMUNICATION**

2021 Mentor for two American Fisheries Society Hutton Fellow high school interns  
 2019 American Fisheries Society Virginia Tech Chapter meeting (invited seminar)  
 2016 Contributed expertise - 9 *Mobula ray* species listed on App. II of CITES (see Pardo et al. 2016b)  
 2015 Public talk: Beaty Biodiversity Museum Way Cool Seminar, Vancouver, BC  
 2014 Graduate workshop series organizer: *Introduction to Data and Statistics in R*, SFU  
 2014 Public talk: *Parental Care and Reproduction in Fishes* Nerd Nite Vancouver, July 2014  
 2014 Undergraduate Diversity Mentor (two students), SSE/ASN Joint meeting, Raleigh NC  
 2014 Graduate workshop talks: *Writing Engagingly* and *Publicizing Your Work*, Grad workshop, SFU

Inclusivity training:  
 AdvanceGEO Bystander Intervention training