Curriculum Vitae Mathew T. Sharples

Spring 2018

University of Colorado, Boulder
Department of Ecology & Evolutionary Biology (EBIO)
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Education

Current Position:

University of Colorado, Boulder, U.S.A.

Degree: Ph.D. Candidate, August 2013—present

Major: Ecology and Evolutionary Biology

University of Massachusetts, Dartmouth, U.S.A. Degree: B.A. (summa cum laude), May 2008 Major: English Literature; Minor: German

Senior Thesis: The Theme of Transcendence in the Work of Seamus Heaney

Publications

Peer-reviewed Articles

Sharples MT. 2017. Vascular Flora of the South San Juan Mountains: a Floristic Inventory of Two Southern Rocky Mountains Slopes. *JBRIT* 11(1): 235—266.

Articles in Review

Sharples MT & Tripp EA. In review. RAD Sequencing Rejects Long-Distance Disjunction in *Stellaria* L. (Caryophyllaceae) and Yields Support for a New Southern Rocky Mountains Endemic. Submitted to: *Taxon*.

Articles in Preparation

Sharples MT & Tripp EA. In prep. Phylogeny and generic circumscription of the cosmopolitan genus *Stellaria* L. (Caryophyllaceae) inferred from RAD loci. Submitting to: *American Journal of Botany*.

Sharples MT & Tripp EA. In prep. Surprising origin of Eurasian diversity revealed in the cosmopolitan genus *Stellaria* L. (Caryophyllaceae) based on a time-calibrated RADseq dataset. Submitting to: *Journal of Biogeography*.

Beeler RB, **Sharples MT** & Tripp EA. In prep. Introgression Among Western North American Bilberries (*Vaccinium* section *Myrtillus*). Submitting to: *Systematic Botany*.

Genomes

GenBank Accession KP300014. Annotated plastid genome of *Ruellia breedlovei*, Acanthaceae: 148682 bases.

Presentations & Meetings

- 2018 2 abstracts submitted for **Botany** 2018.
- 2017 Regional Conference: **Guild of Rocky Mountain Ecologists and Evolutionary Biologists**, University of Colorado Mountain Research Station, U.S.A. "RAD Sequencing Resolves Purported Southern Rockies–Central Asian Disjunction (*Stellaria* L., Caryophyllaceae)". Coauthor: Erin A. Tripp.
- 2017 International Conference: **Botany**, Fort Worth TX, U.S.A. "Resolving the Phylogeny of the Cosmopolitan Genus *Stellaria* L. (Caryophyllaceae) Using ddRADseq". Coauthor: Erin A. Tripp.
- 2016 Regional Conference: **Colorado Native Plant Society**, University of Colorado, Boulder. "Vascular Flora of the South San Juan Mountains".
- 2015 Departmental Seminar, University of Colorado, Boulder. "Systematics, Biogeography, and Trait Evolution of *Stellaria* L. and others".
- 2014 Departmental Seminar, University of Colorado, Boulder. "Vascular Plants & Floristic Affinities of the South San Juan Wilderness of Southern Colorado".

Invited Lectures

- 2017 Plant Systematics Course Lecture, University of Colorado, Boulder. "Caryophyllales".
- 2016 National Conference: **Seafaring in the Middle Ages**, University of Denver, U.S.A. "Plants in the Middle Ages". Co-presenter: Erin Sweany
- 2015 Plant Systematics Course Lecture, University of Colorado, Boulder, U.S.A. "Cucurbitales and Myrtales".

Meetings Attended

- 2017 International Conference: **International Botanical Congress XIX**, Shenzhen, China.
- 2014 International Conference: **Botany**, Boise ID, U.S.A.

Teaching

University of Colorado, Boulder: Graduate Career

Fall 2017	Teaching Assistant for Plant Systematics labs. Full Instructor responsibilities.
	Supervisor: Dr. Stephanie Mayer.
Spring 2017	Teaching Assistant for Non-Science Majors General Biology labs. Full Instructor
	responsibilities. Supervisor: Dr. John Basey.
Fall 2016	Teaching Assistant for Plant Anatomy & Development labs. Full Instructor
	responsibilities. Supervisor: Dr. Stephanie Mayer.
Spring 2016	Teaching Assistant for Plant Biodiversity & Evolution labs. Full Instructor
	responsibilities. Supervisor: Dr. Stephanie Mayer.
Fall 2015	Teaching Assistant for Plant Systematics labs. Full Instructor responsibilities.
	Supervisor: Dr. Erin Tripp.
Spring 2015	Teaching Assistant for Plant Biodiversity & Evolution labs. Full Instructor
	responsibilities. Supervisor: Dr. Stephanie Mayer.
Fall 2014	Teaching Assistant for Plant Anatomy & Development labs. Full Instructor
	responsibilities. Supervisor: Dr. Stephanie Mayer.
Spring 2014	Teaching Assistant for General Biology II labs. Full Instructor responsibilities.
	Supervisor: Dr. John Basey.
Fall 2013	Teaching Assistant for General Biology I labs. Full Instructor responsibilities.
	Supervisor: Dr. John Basey.

University of Colorado, Boulder: Undergraduate Experience

Spring 2013	Undergraduate Teaching Assistant for Plant Anatomy & Development.
	Supervisor: Dr. Stephanie Mayer.
Fall 2012	Undergraduate Teaching Assistant for General Biology 1. Supervisor: Dr. Barbara
	Demmig-Adams.
Spring 2012	Undergraduate Teaching Assistant for General Biology 2. Supervisor: Dr.
	Rebecca Safran.

Society Memberships

American Alpine Club American Society of Plant Taxonomists Botanical Society of America Colorado Native Plant Society International Association for Plant Taxonomy Society for the Study of Evolution

Support

2018	University of Colorado (Boulder), Ecology & Evolutionary Biology One
	Semester Fellowship: \$19000.
2017	American Society of Plant Taxonomists, Graduate Student Research Grant:
	"Inferring the Phylogenetic and Biogeographical History of the Cosmopolitan
	Genus Stellaria L.". \$800.

2017	University of Colorado (Boulder), Ecology & Evolutionary Biology Graduate
	Research Grant: "Systematics, Biogeography and Trait Evolution of <i>Stellaria</i> L." \$2500.
2017	University of Colorado (Boulder), Cynthia H. Schultz Graduate School Small Grant: "Evolutionary and Biogeographic History of the Cosmopolitan Flowering
2017	Plant Genus <i>Stellaria</i> L.". \$2000. American Society of Plant Taxonomists, Travel Grant. \$335.
2017	University of Colorado (Boulder), United Government of Graduate Students Travel Grant. \$300.
2016	University of Colorado (Boulder), Ecology & Evolutionary Biology Graduate
	Student Research Grant: "Systematics, Biogeography and Trait Evolution of <i>Stellaria</i> L." \$2500.
2016	University of Colorado Museum of Natural History, Museum Student Research
	Award Program: "Systematics, Biogeography and Trait Evolution of <i>Stellaria</i> L." \$1200.
2015	University of Colorado (Boulder), Ecology & Evolutionary Biology Graduate
	Student Research Grant: "Testing an Ancient Floristic Connection Hypothesis through the Lens of the Angiosperm Genus Stellaria". \$1500.
2015	University of Colorado Museum Herbarium, Hazel Schmoll Fellowship:
	"Phylogeography of Southern Rockies-Central Asian Species". \$500.
2014	University of Colorado (Boulder), Ecology & Evolutionary Biology Graduate
	Student Research Grant: "Floristic and Phylogeographic Exploration in the
	Southern Rocky Mountains and Beyond". \$2437.
2014	University of Colorado Museum of Natural History, Museum Student Research Award Program: "Floristic and Phylogeographic Exploration in the Southern Rocky Mountains". \$1200.
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Field Experience

1548 collections of vascular plants (>86 families) and cryptograms.

North America: Canada; Costa Rica; U.S.A.: Arizona, California, Colorado, Florida,

Idaho, Montana, Nevada, North Carolina, Texas, Wyoming

Asia: China, India, Kazakhstan, Nepal, Russia (Far East, Siberia)

Europe: Finland, Norway, western Russia, Sweden

Oceania: Australia, New Zealand

South America: Argentina, Colombia, Ecuador, Peru

Museum Contributions

University of Colorado (COLO)

2017 1099 specimens

University of Wyoming (RM)

2017 625 specimens

New York Botanical Garden (NY)

2017 299 specimens

Awards

2017 Excellence in Teaching Award. Source: Department of Ecology & Evolutionary

Biology, University of Colorado, Boulder. \$200.

Service & Committee Membership

2015-present Budget Committee, Department of Ecology & Evolutionary Biology, University of Colorado, Boulder.

Students Advised

<u>Undergraduate Projects, University of Colorado</u>

Reese Beeler (Fall 2015—Spring 2017), phylogeography of the *Vaccinium myrtillus* complex.

Miklos Eger (Summer 2016—Summer 2017), field pollination biology of *Stellaria umbellata*.

Philip Bentz (Fall 2017—present), field and greenhouse pollination biology of *Stellaria irrigua* and *Stellaria longipes*.

Media

2017 Colorado Native Plant Society newsletter (Aquilegia), https://conps.org/wp-content/uploads/2017/10/Aquiilegia-41-4-Summer-2017.-5-1.pdf

Additional Professional Skills & Experience

<u>Computing</u>: Microsoft Software, R, ArcGIS, UNIX OS, genomic bioinformatic pipelines. <u>Wet Lab</u>: DNA extractions, Illumina genomic library preparation, Sanger Sequencing. <u>Languages</u>: English, native speaker; German, advanced reading, writing, and conversation; Russian, beginner-intermediate reading and conversation; Spanish, intermediate reading and conversation.

Other: Very experienced in wilderness travel, particularly in cross-country scenarios. Accomplished international long-distance trekker and mountaineer.

<u>Research Interests</u>: biodiversity, biogeography, Caryophyllaceae, evolutionary trends, floristics, phylogenomics, pollination biology, systematic biology, taxonomy