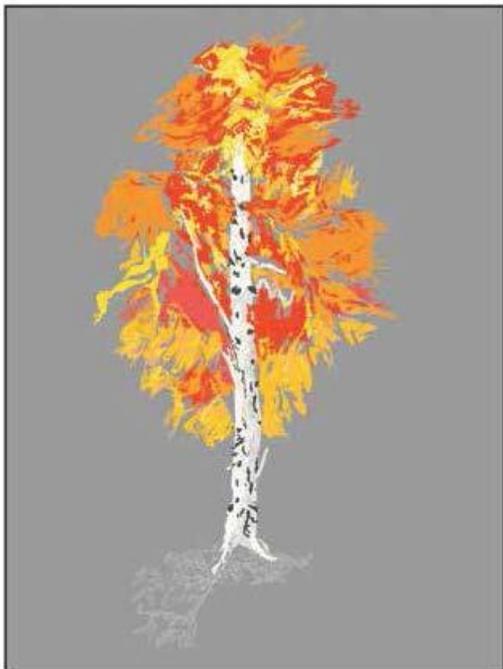


2015 Winner: Emma Bode



POPULUS TREMULOIDES

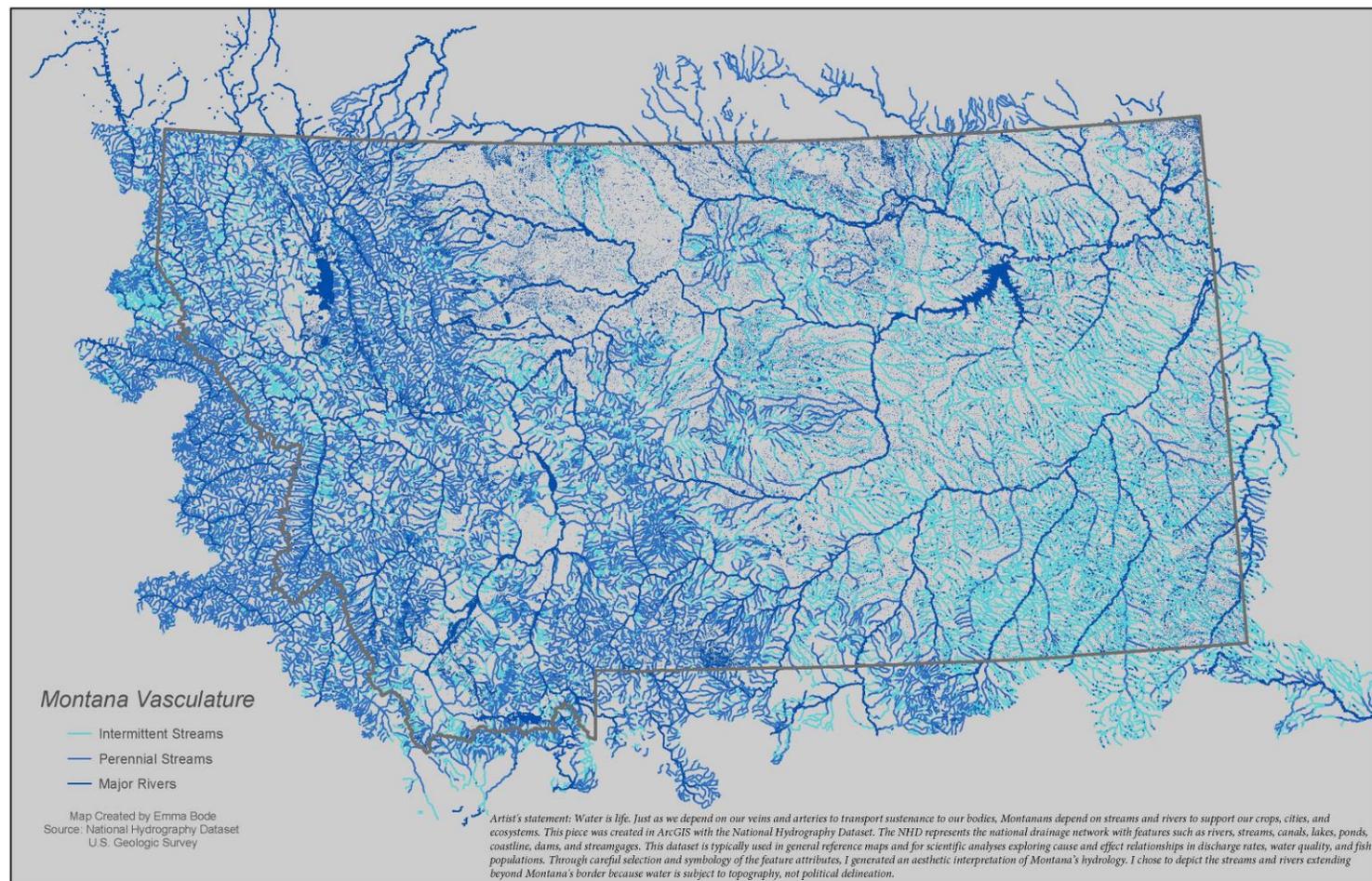
Winning Entry for the 2015 Science as Art Contest

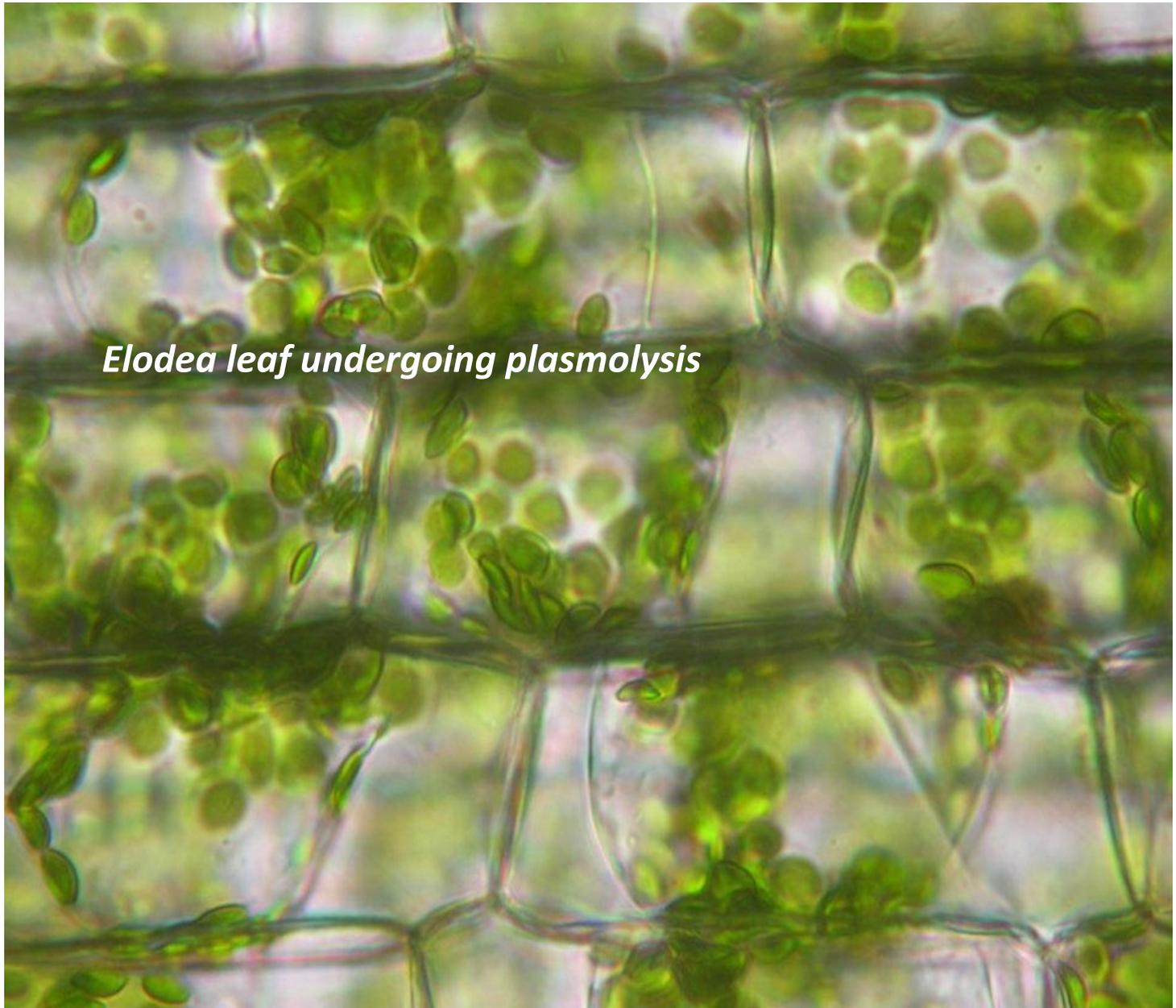
Emma Bode, Environmental Sciences (LRES), won the College's "Science as Art" contest this fall. Bode classified and edited the Gallatin County soils GIS data in ArcMap to create the image of an Aspen tree.

The connection between science and art in the geospatial sciences is overwhelmingly apparent to me. Stuart Challenger's GIS courses stress the importance of good design. Taking this experience a step farther, I created a purely aesthetic interpretation of spatial data. I created this piece using soils data for the Gallatin Valley. Soils data is an ideal data set for artistic manipulation because it is made of many small polygons that are each unique, much like a child's Color By Number worksheet. In order to differentiate classes of polygons, I selected and exported them as a new shapefile. I created several shapefiles for the leaves, three shapefiles for the trunk, and one for the roots. I then manipulated the colors of each shapefile to produce the desired image.

— Emma Bode

2016 Winner: Emma Bode





Elodea leaf undergoing plasmolysis

2018 Winner: Vinicius S. Ferreira



*The creature depicted in this photo is an adult male beetle from the family Lycidae, known as net-winged beetles, and it belongs to the species *Leptolycus (Baholycus) flavoapicalis* Bocak. The image presented here is the result of four hours of work, and a perfect example of how science can be also interpreted as art: 43 photos of this tiny specimen (the specimen is about 5mm long) were taken with a Canon T3i DSLR using an MP-E 65 mm lens and stacked and aligned using the software Zerene Stacker; the final image was edited in Adobe Photoshop and Adobe Lightroom. Beetles are the largest of groups of animals on Earth, where one in every five living animal species is a beetle. The species in the photo belongs to a rarely seen and poorly studied group of beetles within the family Lycidae, the tribe Leptolycini, subject of my PhD studies. Beetles of this group are distributed in South, Central America and in the West Indies and they are unique among other groups of beetles: adult males (like the one from the photo) have wings and the ability to fly, a pair of long antennae and the general appearance of a beetle; adult females, on the other hand, are completely different from the males: they are worm-like creatures, have no wings and live in the ground, among leaf litter. Based on individuals of Leptolycini kept in the Montana Entomology Collection, one of the largest collections of beetles from the West Indies in the World, I am describing over 130 new species of Leptolycini, reconstructing their evolutionary history using morphology and DNA data and trying to understand why these beetles have such a unique biology.*