WITH TRACK CHANGES-CLEAN VERSION BELOW

Using LANDFIRE data to assess current vegetation, late-succession habitat and wildfire exposure risk in the central Upper Peninsula of MI

A crucial component to natural resource stewardship is identifying current vegetation conditions, as well as assessing threats, such as wildfire. Using data and historical ecosystem models from the LANDFIRE program, ArcGIS pro, and R, we compared historical to current vegetation, mapped current late-succession habitat and wildfire exposure risk in the Central Upper Peninsula of Michigan. Further, to aid our stakeholders and streamline our delivery method, we built a web report hosted on GitHub. A few notable patterns emerged which include: 1) a relatively small amount of the area has experienced conversion to human-focused land use, or changes in broad ecosystem type, 2) there have been increases in late-succession habitat compared to historical for some ecosystems (mostly in fire-dependent ecosystems which have missed multiple fire cycles), but a major decline in late-successional habitat for ecosystem northern hardwoods and 3) roughly 20% of the area was classified in the highest wildfire exposure risk category. The entirety of the projects took ~100 hours, including development and deployment of the web report which includes a variety of layouts displaying the current vegetative state and fire risk of the Central Upper Peninsula.

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