Climate change is implicated in shifting fish reproductive phenology. Thermal habitat changes include warmer water temperature, a longer growing season, decreased ice-cover, and more rapid spring warming. Because fish are cold-blooded, such changes in thermal habitat may affect their growth, survival, and reproduction. Coregonines are cold-water fishes that typically spawn during late-autumn or early-winter, and their embryos incubate over winter and hatch in spring. I am developing a degree-day model to evaluate latitudinal differences in, and potential impacts of, changing thermal habitat on the relationship between spawning and hatching dates. The model will be applied to three coregonines from North America and Europe across different latitudes. Phenological shifts and higher annual variability in reproduction could lead to mismatches with larval zooplankton prey and may be related to the coregonine recruitment declines observed worldwide.