

ARTIST STATEMENT

Joseph Smigiel: "Cold Brook Lily Pads"

Near-infrared photography extends human perception of the earthly realm just as other instruments and spectra allow us to witness, record, and marvel at astrophysical phenomena beyond our normal competence.

This image was captured using a modified prosumer digital camera that filters incoming solar radiation, sensing and recording in wavelengths exclusively beyond the visible spectrum and the normal human perception of light.

Some features are rendered very dark due to their absorption of infrared radiation in striking contrast to healthy plant leaves containing chlorophyll, the engine of photosynthetic processes. Chlorophyll is highly reflective of infrared rays and thus healthy plants appear very light-toned in aerial surveys of terrestrial vegetation, or pictorially as seen here.