STEM in the **PARK**™

Science, Technology, Engineering, and Mathematics

Environmental Science
Through a
Drone's Eye

SPatial LITeracy - SPLIT Remote Sensing® CareSheet

BGSU School of Earth, Environment and Society

Remote Sensing of the environment refers to the use of satellite, and aircraft/drone images to monitor features on Earth. Remote sensing makes it possible to monitor large areas, inaccessible areas, areas that cannot be disturbs, and **areas that only birds can see**. Examples of remote sensing monitoring includes the monitoring of volcanos, deforestation, agricultural fields, water quantity and quality, geological features, flooding, oceans, ice, coastal areas, vegetation changes, etc. The remote sensing instruments and cameras measure reflected light energy from objects and provide you with images. The instruments and cameras translate light into color pretty much the same way as the human eye.

How drones help our environment

Drones (or UAVs or UASs) are being used to **help our environment;** they are important for saving our planet. Drone can see details and objects as small as 2-3 in. For instance, it can see individual leaves, different algae, sharks, corals, bears, and crocodiles – small things over large areas that you cannot see otherwise.

When you download images from a camera, you use software to process your images. With a click or two you calculate light reflectance and then you use RGB colors to assign different color combinations to your images. Every color combination shows different details in your study area and then Remote Sensing becomes Art. This combination of Science and Art is what makes Remote Sensing great.

For more information contact:

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