Checkerboard in Idaho

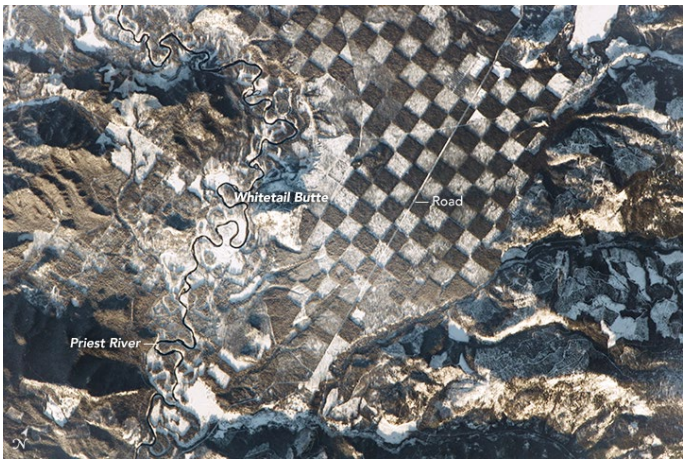

Image by member of Expedition 50 crew via NASA Earth Observatory

An astronaut aboard the International Space Station noticed this checkerboard pattern in North Idaho along the Priest River and took a photograph. The photo was taken near sunset, with the angle of sunlight highlighting some areas and casting others in shadow.

According to NASA, the pattern is the result of land management decisions made in the 1800s. Square mile parcels of land were given to the Northern Pacific Railroad, which were later sold off to timber companies for logging. In an effort to balance the natural ecosystem and logging interests, alternate plots of land were given away. The land has been managed by the US Forest Service since the 1960s. The white areas of the checkerboard pattern are where snow has fallen on deforested ground. The darker squares are areas of dense forest.

Possible topics for discussion:

- Why is this pattern visible from space? Would it be visible at different times of the year? Different times of day?
- How effective was this method of land management?
- How did this method impact forest fires?
- How does the diversity of animal and plant life differ in the light and dark sections of the checkerboard?

Additional Resources:

- Idaho State Journal article NASA photo shows dramatic checkerboard design along Idaho river
- LiveScience article Chess, Anyone? Giant Checkerboard Spied from Space

Performance Standards:

5th Grade	Middle School	High School
5-LS-2.4. Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change.	MS-LS-2.6. Evaluate competing design solutions for maintaining biodiversity and ecosystem services. MS-ESS-3.3. Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment.	HS-LS-2.6. Design, evaluate, and/or refine practices used to manage a natural resource based on direct and indirect influences of human activities on biodiversity and ecosystem health. HS-ESS-3.3. Illustrate relationships among management of natural resources, the sustainability of human populations, and biodiversity.