Biobased Products Help Protect Yellowstone

Yellowstone National Park celebrated its 125th anniversary in 1997 and the question arose about what could be done to protect America's first national park for the next 125 years. The use of biodiesel fuel and other environmental activities laid an excellent foundation for an overarching effort that is now called "The Greening of Yellowstone."

Environmental Protection Specialist Jim Evanoff takes his job seriously. "When you work at Yellowstone National Park, it is incumbent upon you to do everything you can to be innovative in protecting the Park's sensitive environment," he says.

Evanoff and the Park's best known efforts regarding biobased products center on their early use of biodiesel. In addition, they are early adopters and proactive advocates for a number of other products including:

- ***Using only biobased cleaning/janitorial products—over 700 gallons in 2007.***
- ***Biobased hydraulic fluids are used in many applications throughout its extensive fleet of vehicles.***
- ***Using biobased two-stroke lubricating oils in chain saws, lawn mowers and other equipment.***
- ***All of the Park-owned diesel engines, ranging from trucks to generators to snow trail groomers, are powered by B20 (20 percent biodiesel and 80 percent diesel). The Park's use of B20 displaces more than 25,000 gallons of petroleum diesel every year. Annually, it also prevents more than 500 metric tons of carbon dioxide from entering into Yellowstone's atmosphere.***
- ***Concessions operations in Yellowstone use only biodiesel blends in all diesel applications as well as print with soy ink.***
- ***Biodiesel is available to the public at four pumps in three states (Idaho, Montana and Wyoming) that straddle Yellowstone's ecosystem to aid tourists in protecting the Park.***

During a conversation with Evanoff, it usually returns to his favorite topic, biodiesel. That's only natural because each year, as he explains it, the Park has more than three million visitors and virtually every one of them arrives by automobile or bus. Beyond that, Yellowstone itself has a fleet of more than 700 vehicles. It is no wonder that Jim's first environmental concern centers around vehicular transportation, and biodiesel fuel, in particular.

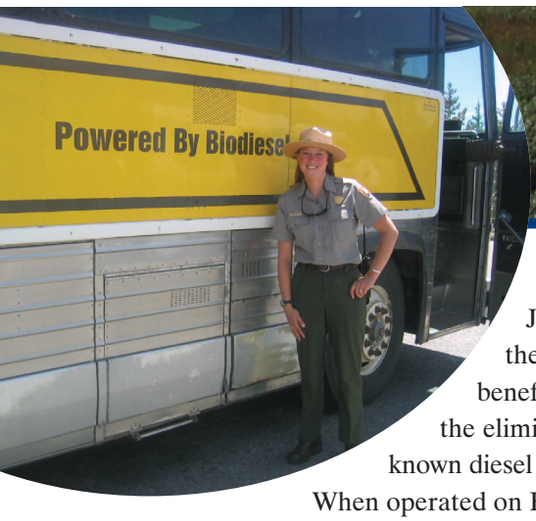
Yellowstone depends on biodiesel and other biobased products even when temperatures drop and snow flies.

"I first became aware of biodiesel in 1995 through a proposed demonstration project with the University of Idaho, State of Montana, the Department of Energy and a myriad of private entities" he explains. "It just seemed like something we should investigate and try."

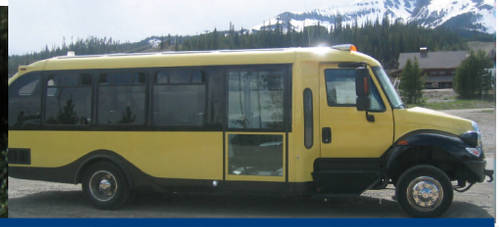
Out of that early interest grew Jim's idea to run the now famous diesel pickup truck on B100 (100% biodiesel). As an integral part of the project, Dodge Truck, Inc. donated the new truck. In 2008, Jim continues to operate the truck that currently has 195,000 miles and still uses B100 all year round in sometimes harsh weather/temperature conditions. The truck became a symbol for the use of biodiesel not only in Yellowstone, but also in other facilities as Jim spread the biodiesel/ biobased message. "Over the years I've given dozens of presentations on the environmental advantages of using biodiesel, not only in the Park system but to other entities as well," he says.

Biobased cleaning products play an important role in helping protect Yellowstone's sensitive environment as well as the health and well being of its cleaning staff. Based on a National Park Service study for all of its facilities in the Northwest, Yellowstone was able to reduce the number of cleaning products from more than 130 to 15, thus saving money and time.

Jim Evanoff's pickup led the way for biobased products beginning in 1995 when he started using B100 biodiesel fuel. Now, nearly 200,000 miles later the pickup is still going strong and Jim is leading the way by introducing other biobased products into use at the Park.



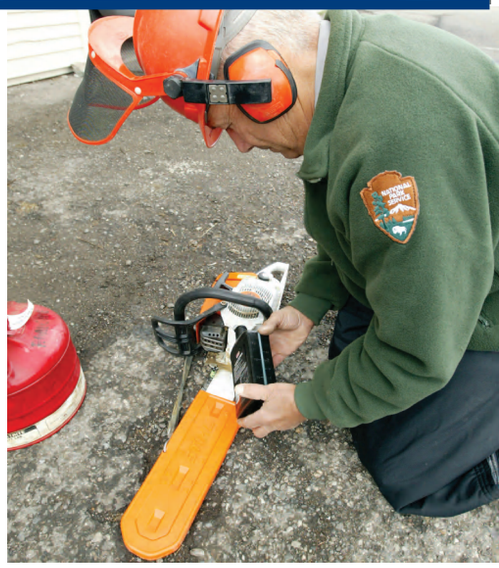
Park ranger Alexis Brooks and a biodiesel-powered bus used for transport of employees as well as tours.



Jim still enjoys telling the story about one of the beneficial effects of biodiesel- the elimination of the well known diesel fuel exhaust odor. When operated on B100, vehicles produce a fume aroma that smells much like that of cooking French fries. "There became concern that this smell might attract some of the park's grizzly bears. To ensure that the truck was not a bear attractant, it was driven to Washington State University where tests were conducted with captive bears that were being used for research. Eventually it was concluded that the bears exhibited minimal attraction to the exhaust fumes," he says.

Also, the Park has revived an old tradition from the 1930s and 40s – a renovated fleet of famous 16-passenger "old yellow buses" that moves visitors on winding and narrow roads to major attractions throughout the Park. Additionally, six replicas of the old buses are powered by biodiesel. These replicas can be converted from wheels to tracks so they can be operated during the winter season. The seven original old yellow buses that have been restored are powered by an ethanol-blended fuel. "These buses have several purposes," explains Jim. "They reduce congestion and obviously cut down fuel consumption and exhaust fumes, but they also are a way of bringing biobased fuel to the attention of visitors.

"We have the world's largest concentration of geo-thermal features, and they present a unique environmental challenge. Just think, during the summer 10,000 tourists a day, most of them driving their own automobiles, visit Old Faithful alone. As stewards of the world's first national park, we continually strive do everything possible to preserve and protect all of the natural resources we have here at Yellowstone."



Biobased lubricants are used by maintenance crews throughout Yellowstone Park's 2.2 million acres. These products include hydraulic fluid, grease and bar-and-chain oils.

Multiple photos provided by National Park Service.

FACT FILE

America's farms are just beginning to tap their potential as a source for natural, renewable biobased products that offer benefits to worker health, the environment, America's economy and energy security. To learn more about the many biobased products made from soybeans, go to **www.soybiobased.org.**

Because of the potential for biobased products to create new markets for soybeans, U.S. soybean farmers have invested millions of dollars to research, test and promote biobased products. Much of this work was done through the United Soybean Board (USB), which is composed of 68 U.S. soybean farmers appointed by the U.S. Secretary of Agriculture to invest soybean check-off funds. As stipulated in the Soybean Promotion, Research and Consumer Information Act, USDA's Agricultural Marketing Service has oversight responsibilities for the soybean checkoff.

For more information on how biobased products benefit Yellowstone National Park, contact Jim Evanoff at (307) 344-2311, or at Jim_Evanoff@nps.gov

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