



National Wildlife Federation Fact Sheet: How Ethanol in Gas Hurts Sportsmen

A Campaign to Protect Anglers, Clean Water, Public Health, and Wildlife

What is the ethanol mandate and why is it so harmful?

A federal mandate requires that ethanol, a biofuel made primarily from corn, be blended into gasoline. While this was originally created as an alternative fuel that would be better for the environment, we now know about the harm this mandate has caused. Ethanol production takes away important wildlife habitat and contributes to runoff and pollution from farms. This runoff produces harmful algae in nearby waterways that can be toxic to humans. The algae also drains the water of oxygen – suffocating aquatic wildlife.

How does ethanol damage engines?

Many boat engines and fuel systems in particular are only designed, calibrated, and certified to use lower amounts of ethanol – ideally zero. But because of the ethanol mandate, fuel without any ethanol is becoming more difficult to find. Ethanol burns hotter than regular gasoline, and is more corrosive to the soft parts of small engines. Additionally, when blended fuel sits for a long time, the ethanol and gasoline separate into two different solutions, with the ethanol sinking to the bottom of the tank. Boat engines won't run once this happens, and the ethanol at the bottom of the tank accelerates long-term corrosion.

How does the ethanol mandate affect sportsmen?

In addition to being harmful to wildlife and public health, ethanol in gas wreaks havoc on small engines in everything from boats to off-road vehicles and even chainsaws. Ethanol-induced engine failure has led to expensive repairs or full engine replacements. Particularly for boaters, ethanol in gasoline is also a significant safety concern, because engine failure on the open water is a recipe for disaster.



What are the economic impacts?

Ethanol can add up to expensive repairs

For the average angler or recreational boater, damage from ethanol can add up to expensive repairs. A survey by *Boating Industry* magazine found that **73 percent of those polled had seen damage to boat engines through their businesses**. In addition, **14 percent said that ethanol was responsible for more than half their engine repair work** and more than 60 percent said it accounted for at least one-fifth of their business.



America's anglers generate

More than **\$48 billion in retail sales** and contribute **\$115 billion to the U.S. economy** each year. This spending also helps **support the jobs of over 828,000 people**. If ethanol continues to sabotage anglers and the boating industry overall, these funding streams could be in jeopardy in the future.

Outbreaks of algae

On top of the problems from engine damage, runoff from corn ethanol production creates outbreaks of algae that kill fish and hurt tourism. **Massive algae blooms in Lake Erie cost the area billions of dollars** each summer in lost fishing, recreation, and lodging revenue.

