



New Water Bill law gives ok to electric barrier, other national projects Override of Bush veto assures new life for critical economic & environmentally sensitive water projects

WASHINGTON – President Bush suffered the first veto override of his seven-year-old presidency on November 8 as the Senate enacted a \$23 billion water resources bill despite his protest that it was filled with unnecessary projects. The 79-14 Senate vote included 34 Republicans who defied the president. Enactment was a foregone conclusion, but it still marked a milestone for a president who spent his first six years with a much friendlier Congress controlled by his Republican Party.

A majority of House Republicans joined Democrats on November 6 to override President Bush's Water Bill veto. The vote was 361 to 54, far more than needed to reject the veto. Both votes easily exceeded the two-thirds majority needed in each chamber to negate a presidential veto.

Late last week the President had vetoed the Water Resources Development Act, a bill that contained the much-needed authorization for the Asian carp dispersal barrier.

The Water Bill authorizes over 900 Army Corps of Engineers projects, such as dams, sewage plants and beach restoration, that are important to local communities and includes important Great Lakes projects including new and bigger locks on the St. Marys River in Sault Ste. Marie; and water quality improvements for Lake St. Clair and the St. Clair River.

The bill authorizes billions of dollars in coastal restoration, river navigation and dredging projects, levee construction and other Army Corps of Engineers public-works efforts. Seven years in the making, the

abiding Illinois citizens and all the

In this issue...

Changes in Consent Decree	2
Hatcheries cause loss of productivity...	3
Lake Erie commercial fined \$45,000	3
Catch-and-release in less than 4 min.	4
Acid rain unfavorable to fish	4
Transporting/possession carp banned....	5
WDNR holds meetings on cormorants....	5
Hunters & anglers impact economy.....	6
Spotted muskies stocked in Green Bay ..	7
IL Youth Goose Hunt app deadline	7
COs bust caviar ring	7
Five added to Fishing Hall of Fame.....	7
NMMA backs Recreational Boat Act	8
Clean air pact to cost AEP	8
State cops propose age ban on firearms.	8
Agency to test ballast treatment.....	9
No ruffe captured during fall survey.....	9
CG urges competency/safety checks	9
Fewer in outdoor recreation	10
WI circuit court sides with gun owner ...	10
Feds to help fight VHS fish virus.....	11
Spiny waterfleas still spreading	11
Exec order protects bass/drum.....	11
Repairs to Cheboygan lock and dam....	11

Laws crack down on child support violators Penalizes law-abiding sportsmen with possible identity theft

New technology allows IDNR to identify parents who have outstanding child support payments when they apply for Illinois hunting and fishing permits. However, the law, in an attempt to catch deadbeat parents, is actually penalizing over 98% of law-abiding Illinois residents to effect a change on .078% of the “deadbeat dads.” The law — a federal regulation approved by Congress and signed into law by the president — also infringes on our right to privacy and offers real threats to identify theft.

The Illinois Department of Healthcare and Family Services identified nearly 6,000 Illinois parents who owe more than \$60 million in child support through the new point-of-sale system. They didn't mention the hundreds of thousands of law-

measure took on particular political resonance in the aftermath of Hurricane Katrina, as Gulf Coast lawmakers secured nearly \$2 billion in restoration and levee construction projects for the region. The bill would also continue projects such as the restoration of the Everglades and the dredging of the upper Mississippi River, while expanding oversight of the Army Corps.

Most importantly for the region and the nation is the completion of the all-important Electronic Barrier II on the Chicago Sanitary and Ship Canal to keep Asian carp and other foreign critters out of the Great Lakes and regional invasives from moving downstream to Mississippi watershed states. It also authorizes upgrades and makes permanent Barrier I

Water Bill approved

Continued on page 11

other states that are penalized with this overbearing and hurtful piece of legislation.

With over 761,800 Illinois fishing licenses and 255,000 hunting licenses sold annually, it doesn't take a rocket scientist to recognize the fact that the law is punishing the greater preponderance of Illinois residents. The law comes from federal regulations authorizing states to require a social security number given when applying for a hunting or fishing license. The law is flawed because it penalizes law-abiding citizens — well over 99% of the nation's sportsmen — to catch a miniscule less than 1% of deadbeat dads.

Our legislators, and the system, have it all wrong; they're penalizing the masses to catch a few. ✧

Key changes in Consent Decree fly under the radar

The *Traverse City Record Eagle* reports several new changes have occurred recently, and they seem to have slid under the sportsman's radar. The 2007 Inland Consent Decree (ICD) between five Indian tribes, the Feds and the Michigan DNR was agreed to on September 26. The ICD grants the Bay Mills Indian Community, Sault Ste. Marie Tribe of Chippewa Indians, Little Traverse Bay Bands of Odawa Indians, Grand Traverse Band of Ottawa and Chippewa Indians, and Little River Band of Ottawa Indians, certain fishing, gathering and hunting rights.

The key issues include:

► This agreement allows fishing, gathering and hunting on a subsistence basis, says Michigan Fish Chief Kelly Smith. Smith says this means collecting sufficient resources to feed a tribal family and keep them warm.

► Smith said that 4.6 million acres are involved in the ICD in the central and western third of the northern Lower Peninsula and the eastern two-thirds of the Upper Peninsula. Numerous lakes and rivers are included in both peninsulas.

► "Both state and tribal officers can enforce this Decree," Smith said. "Tribal officers can check non-tribal sportsmen but it ends there, and if necessary, they would call in a state conservation officer. Tribal members would go to tribal courts." He said the tribes have their own regulations, and the state and tribes will meet at least once a year to determine if the resources are being properly managed.

► The tribes can harvest birch bark (which, if properly done, will not damage the tree), collect sap to make maple syrup, and collect dead-and-down firewood. The tribes cannot harvest standing timber or extract gravel, minerals or sand from state land.

► Tribal members can exercise these rights on any land open to the public, and any Commercial Forest Act land that is 1,000 acres or larger. They may not trespass on private property without permission.

► Some exceptions to state fish and game laws exist with the tribes. If the DNR determines a lake must be completely eradicated of fish, the tribes can take those fish for commercial purposes. "However," Smith said, "it must be a complete eradication."

► Some anglers worry about gill netting in inland lakes. Smith said gill nets will be illegal to use with two exceptions. A tribal biologist can use one to check fish populations, and during a complete eradication a permit will be issued for one net for one tribal member and only for 24 hours. They must have a specified bag limit, and that harvest must be reported. There will not be a wide-open net fishery.

► There are other exceptions. Tribes will have opportunities to spear or fish with hook and line during the closed seasons for non-tribal anglers. The season in the Lower Peninsula is March 15 to the Friday before the last Saturday in April. In the Upper Peninsula, the season will be April 1 through May 14. Smith said there are sufficient safeguards built into this agreement to protect our fisheries.

► The tribal limit for deer is five animals, and the season is from the Tuesday after Labor Day through the first full week of January. The five-deer bag limit means one buck can be taken before November 1 and one after November 14 with a firearm. The tribes will observe a two-week quiet period before the statewide firearm deer opener. The tribal bear season will run from September 10 through October, and the tribes are entitled to 10 percent of the bear and elk licenses issued.

► There are approximately 50,000 tribal members. Smith adds a final note: "Our best advice is for sportsmen to respect the tribe's rights to fish or hunt. This agreement does not impact state anglers, hunters and trappers. Give this agreement an opportunity to work, and everyone will get their fair share of the resources of this state." ✧



• Established 1972 •

President

Daniel N. Thomas, *Illinois*

Vice President

Robert Mitchell, *Michigan*

Secretary

Michael D. Sanger, *Wisconsin*

Treasurer

Thomas G. Couston, *Illinois*

DIRECTORS

Illinois – Robert Gaik

Indiana – Charles Lentine

Michigan – Tom Hamilton

Minnesota – Dave Koneczny

New York – Thomas Marks

Ohio – Rick Unger

Ontario – Darryl Choronzey

Pennsylvania – Ed Kissell

Wisconsin – Louis Kowieski

Position Statement

Representing a major interest in the aquatic resources of the Great Lakes states and the province of Ontario, the Great Lakes Sport Fishing Council is a confederation of organizations and individuals with a concern for the present and future of sport fishing, our natural resources and the ecosystem in which we live. We encourage the wise use of our resources and a search for the truth about the issues confronting us.

Inland Seas Angler

GREAT LAKES BASIN REPORT

Publisher

Dan Thomas, 630/941-1351

Editor

Jeanette Thomas

Editorial Adviser

Bob Schmidt, 815/961-0367

Webmaster

Robert James, 630/530-7760

© Copyright 2005 by Great Lakes Basin Publications, the *INLAND SEAS ANGLERS-GREAT LAKES BASIN REPORT* is the newsletter of the Great Lakes Sport Fishing Council, a federally recognized not-for-profit 501(c)(3) organization, and recognized for tax-deductible giving by the federal government.

Opinions expressed are those of the authors and not necessarily those of GLSFC, its officers or staff. Reproduction of any material by paid-up members is encouraged, but appropriate credit must be given. Reproduction by others without written permission is prohibited.

Address Change: Please send six weeks in advance with old mailing label to GREAT LAKES BASIN REPORT, P.O. Box 297, Elmhurst, IL 60126, (630) 941-1351; Fax (630) 941-1196; staff@great-lakes.org.

Steelhead hatcheries cause “stunning” loss of reproductive ability

CORVALLIS, Ore. – The rearing of steelhead trout in hatcheries causes a dramatic and unexpectedly fast drop in their ability to reproduce in the wild, a new Oregon State University study shows, and raises serious questions about the wisdom of historic hatchery practices.

The research demonstrates for the first time that the reproductive success of steelhead trout, an important salmonid species, can drop by close to 40% per captive-reared generation. The study reflects data from experiments in Oregon’s Hood River.

“For fish to so quickly lose their ability to reproduce is stunning, it’s just remarkable,” said Michael Blouin, an OSU associate professor of zoology. “We were not surprised at the type of effect but at the speed. We thought it would be more gradual. If it weren’t our own data I would have difficulty believing the results.”

Fish reared in a hatchery for two generations had around half the reproductive fitness of fish reared for a single generation. The effects appear to be genetic, scientists said, and probably result from evolutionary pressures that quickly select for characteristics that are favored in the safe, placid world of the hatchery, but not in the comparatively hostile natural environment.

“Among other things, this study proves with no doubt that wild fish and hatchery fish are not the same, despite their appearances,” said Blouin. “Some have suggested that hatchery and wild fish are equivalent, but these data really put the final nail in the coffin of that argument.” Even a few generations of domestication may have significant negative effects, and repeated use of captive-reared parents to supplement wild populations “should be carefully reconsidered,” the scientists said in their report.

Traditionally, salmon and steelhead hatcheries obtained their brood stock and eggs from fish that were repeatedly bred in hatcheries. They tended to be more docile,

adapted well to surface feeding, and they thrived and survived at an 85-95 percent level in the safe hatchery environment.

More recently, some “supplementation” hatchery operations have moved to the use of wild fish for their brood stock, on the theory that their offspring would retain more ability to survive and reproduce in the wild, and perhaps help rebuild threatened populations.

“What happens to wild populations when they interbreed with hatchery fish still remains an open question,” Blouin said. “But there is good reason to be worried.”

Earlier work by researchers from OSU and the Oregon Department of Fish and Wildlife had suggested that first-generation hatchery fish from wild brood stock probably were not a concern, and indeed could provide a short-term boost to a wild population. But the newest findings call even that conclusion into question, he said.

“The problem is in the second and subsequent generations,” Blouin said. “There is now no question that using fish of hatchery ancestry to produce more hatchery fish quickly results in stocks that perform poorly in nature.”

Evolution can rapidly select for fish of certain types, experts say, because of the huge numbers of eggs and smolts produced and the relatively few fish that survive to adulthood. About 10,000 eggs can eventually turn into fewer than 100 adults, Blouin said, and these are genetically selected for whatever characteristics favored their survival. Offspring that inherit traits favored in hatchery fish can be at a serious disadvantage in the wild where they face risks such as an uncertain food supply and many predators.

Because of the intense pressures of natural selection, Blouin said, salmon and steelhead populations would probably quickly revert to their natural state once hatchery fish were removed.

However, just removing hatchery fish may not ensure the survival of

wild populations. Studies such as this consider only the genetic background of fish and the effects of hatchery selection on those genetics, and not other issues that may also affect salmon or steelhead fisheries, such as pollution, stream degradation or climate change.

Blouin cautioned that these data should not be used as an indictment of all hatchery programs. “Hatcheries can have a place in fisheries management,” he said. “The key issue is how to minimize their impacts on wild populations.”

This research was conducted through use of 15 years of DNA tracking technology of fish breeding in Hood River, a mountain stream that flows northward off Mount Hood into the Columbia River. DNA analysis with scales was done with about 15,000 fish since 1991. This research has been supported by the Bonneville Power Administration and the Oregon Department of Fish and Wildlife. ✧

Lake Erie commercial fined \$45,000

CHATHAM – An Erieau commercial fisher has been fined \$45,000 (CDN) for exceeding his yellow perch limit by 7,650 kilograms (16,865 lbs.). Allen McCormack, 47 pleaded guilty to exceeding his assigned yellow perch limit for 2006. McCormack is the holder of a commercial fishing license on Lake Erie.

Investigators found that during the fall of 2006, yellow perch were caught on 19 occasions after the assigned license limit had been reached. Judge B. Thomas heard the case in the Ontario Court of Justice, Chatham, on October 12, 2007.

To report a natural resource violation, call 1-877-TIPS-MNR (847-7667) toll-free any time or contact your local ministry office during regular business hours. You can also call Crime Stoppers anonymously at 1-800-222-TIPS (8477). ✧

Going fishing? Catch-and-release in less than four minutes, please

Recreational fishing that involves catch-and-release may seem like just good fun, and that released fish go on to live happily ever after. However, a recent study at the University of Illinois shows that improper handling techniques by anglers can increase the likelihood of released fish being caught by predators.

After the stress of the catch and lack of oxygen from being out of water, the fish is in a weakened state. When it eventually gets released back into the water, if fish haven't been handled properly, they are more likely to be caught by a predator.

A study on the effects of catch-and-release angling on bonefish was conducted by a team led by University of Illinois researcher Cory Suski.

"Whenever a fish is caught and reeled in, it expends a lot of energy so that's one stressor," said Suski. Depending upon the skill of the angler, the catching can last a long time and put additional stress on the fish. When the fish is brought up on the deck or in the boat to measure and take a picture, it faces an additional challenge and cannot obtain enough oxygen, and the fish continues to accumulate physiological disturbances. "Our recommendation

to catch-and-release sport anglers is that they minimize the time it takes to actually land the fish and take a picture, and then get it back into the water as soon as possible."

Suski's goal isn't to eliminate catch-and-release sport fishing; in fact he hopes the research will help conserve fish populations and the economic benefits from recreational fishing.

How long can a fish be out of water? Results from the study showed that both the duration of an exercise bout (the catch) longer than four minutes, as well as the length of exposure to air, will result in a proportional increase in negative effects on the fishes' physiological condition. The study also showed that the longer duration of the catch-and-release, the longer the time the fish needed to recover and the greater likelihood of the fish being caught by predators.

The fish in the study were caught in nets, put into dark tanks and allowed to rest. Later they were chased to simulate angling. Blood samples were taken at various time intervals after the angling simulation in order to monitor the levels of calcium, lactate and glucose during recovery.

"We found that it took two to four hours for the fish to recover to normal levels. We also observed that early during the recovery time the fish were acting kind of woozy — that behavior would mean they would be less likely to out-swim a predator," said Suski. "Our study indicated that the four-hour recovery for bonefish is sufficient for at least some physiological variables to return to baseline values."

Suski likened the fishes' physiological changes when being caught to the lactate that builds up in a runner's muscles after running a 100-yard sprint. The runner's heart rate and breathing may return to normal fairly quickly, but the lactate build-up can take a much longer time to return to normal.

The study identified several strategies for fisheries management in catch-and-release settings:

- ▶ Minimize length of time spent angling the fish
- ▶ Minimize length of time fish is exposed to air after being caught
- ▶ The longer that the fish is presented with challenges, the longer it will take to recover after being released
- ▶ The temperature of the water can also affect recovery time — warmer water may increase recovery time ◇

Acid rain makes some park streams unfavorable to fish

Many streams in Shenandoah National Park are vulnerable to acid rain. Steep slopes, small watersheds, and underlying geology, combined with acid rain make many streams inhospitable to native fish for extended periods of time, according to the USGS.

"Because of acid rain, Shenandoah is the third most contaminated park in the national park system," said Karen Rice, the USGS scientist who led the study. "Many streams in the park have low acid neutralizing capacities for periods lasting from six hours to one week. About 14 percent of the park's

watersheds will have 3-day episodes of acidity sufficient to kill native fish such as brook trout. These high acid episodes occur at least once every two years."

Acid neutralizing capacity is an important factor in stream-water quality and biologic health. In Shenandoah National Park, the rains are typically ten times more acidic than normal rainfall. The pH of rainfall in the park is usually 4.6, although it has dipped well below 4.0. Normal rain has a pH of 5.6. (pH is a logarithmic scale; therefore each whole number denotes a 10-fold change.)

While this study did not look at likely impacts to fish populations, the long-term outlook for fish inhabiting streams with the lowest acid neutralizing capacity is not good. Over the next 40-100 years, there is a greater than 90 percent probability in the most vulnerable streams of at least one acid episode every year for four consecutive years.

The USGS, and the University of Virginia, in cooperation with the National Park Service began this study in 2002 to predict stream response to acid rain. They found that the vulnerability of a stream to acid rain was controlled by a combination

of factors including watershed size, elevation, steepness of gradient and underlying rock type. ✧

Transporting of black carp or possession now banned

The USFWS last month added black carp to the list of injurious fish under the Lacey Act. This action will prohibit live black carp and hybrids from being imported into or transported between the continental U.S., District of Columbia, Hawaii, Puerto Rico, or any territory or possession of the United States.

Black carp, also known as snail carp, black amur, or Chinese roach, is a freshwater fish that inhabits lakes and lower reaches of large, fast moving rivers and associated backwaters, including canals and reservoirs. Black carp can grow to more than three feet in length, weigh 33 lbs. and can live to at least 15 years of age. Adult black carp are bottom feeders that almost exclusively eat mollusks (mussels and snails) when available, but can eat insects, shrimp, commercial fish feeds and

aquatic plants.

Powerful teeth permit the black carp to crush the thick shells of large mollusks, and one fish can consume a few pounds of mussels each day. The mouth of an adult black carp is much larger than most native mollusk-eating fish — presenting a new threat to native mussel species.

Black carp originally entered the United States in 1973 as a “contaminant” in imported shipments of grass carp or other Chinese carp stocks. The second introduction of black carp took place in the early 1980s when it was used in fish production ponds in the southeastern U.S. for biological control of a parasite, and as a potential food fish. Since that time black carp have become more commonly used and transported, particularly during the late 1990s to control another species

of snail-borne parasite at primarily catfish and hybrid striped bass farms.

Live black carp can now be imported only under federal permit for scientific, medical, educational, or zoological purposes, or without a permit by Federal agencies solely for their own use. Permits will also be required for the interstate transportation of live black carp or viable eggs currently held in the United States, for scientific, medical, educational, or zoological purposes.

A listing does not prohibit intrastate transport or possession of live fish within States where not prohibited by the State. Any regulation pertaining to the use of these species within States continues to be the responsibility of each State. This injurious wildlife listing does not prohibit the importation or transport of dead black carp. ♦

Wisconsin DNR holds meetings on cormorant management

Proposed plan would reduce cormorant populations along Lake Michigan and Green Bay

Breeding populations of double-crested cormorants — a once rare colonial nesting water bird that is now common along the Great Lakes and other costal areas — would be reduced by half along Green Bay and Lake Michigan under a proposed management plan that was the subject of three public meetings.

Staffs from the DNR Wildlife, Endangered Resources, and Fisheries programs prepared a management plan to reduce breeding populations of cormorants on islands of Green Bay and Lake Michigan, which currently are home to more than 12,000 nesting pairs. The colonies account for about 90% of the state’s breeding populations of cormorants.

The population growth has raised concerns among commercial fishermen and recreational anglers that cormorants are excessively preying on yellow perch and other fish in Green Bay and Lake Michigan. Biologists are also

concerned that the large cormorant colonies may have a

negative affect on the vegetation and other water bird populations on the islands where the colonies are located.

The U.S. Fish and Wildlife Service allows federal, state, and tribal agencies to take action to control cormorants where public resource damage can be documented and cormorant management can be shown to abate damage to the resource. The DNR claims most other states in the region have conducted Environmental Assessments of cormorant management that have demonstrated a need to take action to control populations.

“Wisconsin has not conducted this Environmental Assessment, and in order to do so, we must first establish management objectives for cormorants in Wisconsin,” managers say.

The management plan is directed at reducing cormorant breeding numbers without causing the birds to

abandon the colonies, which may increase the likelihood that

cormorants would pioneer new breeding sites. It recommends that the population objective for four distinct colonies with 10,000 nests on Northern Door County Islands be reduced to 5,000 nests, with no less than 500 nests at any one of the colonies, and that the current colony of about 2,100 nests at Cat Island on Lower Green Bay be reduced to 1,000 nests.

Cormorant numbers in the remainder of the state are stable to declining, so recommended management objectives are directed only at the Lake Michigan breeding colonies. Management techniques may include egg oiling, nest destruction, and shooting cormorants.

At the public meetings, DNR staff presented information on the history of cormorant breeding numbers in Wisconsin, potential impacts to public resources due to cormorant population expansion, and Wisconsin's role in the Great Lakes regional management of cormorants. ♦

Hunters and anglers have immense impact on nation's economy

Study reveals immense economic powerhouse impact of hunting and fishing in America

A new report by the Congressional Sportsmen's Foundation shows America's 34 million hunters and anglers are among the most prominent and influential of all demographic groups. Spending more than \$76 billion a year on hunting and fishing, America's hunters and anglers would rank in the top 20 list on the Fortune 500. In fact their spending is greater than the revenues of high-tech giants Microsoft, Google, eBay and Yahoo combined.

These latest figures demonstrate that season after season hunters and anglers are an economic powerhouse, driving the economy from big businesses to rural towns, through booms and recessions. They directly support 1.6 million jobs, which is twice as many jobs as the combined civilian payrolls of the Air Force, Army, Navy and Marine Corps.

While hunting and fishing are generally thought of as just outdoor traditions, they actually comprise an outdoor nation — both in terms of economic impact, and in turning out the vote on Election Day. If the \$76 billion sportsmen spend on hunting and fishing was the Gross Domestic Product of a country, sportsmen as a nation would rank 57th out of 181 countries.

- Spending by sportsmen generates \$76 billion annually
- Sportsmen generate \$25 billion a year in federal, state and local taxes
- Hunters and anglers support 1.6 million jobs
- Hunters and anglers are the original green movement, spending more than \$1 billion on licenses, stamps, tags and permits annually, all of which goes to fund conservation programs run by state fish and wildlife agencies.
- It is estimated that there are forty million sportsmen of voting age in the U.S., nearly a third of the entire vote. Nearly 8 in 10 hunters always vote in presidential elections.

Broken down to a daily spending figure, the economic stimulus of

hunting and fishing comes out to an astounding \$208 million a day. This spending keeps people working: not just in typical hunting and fishing jobs, but also in gas stations, retail, restaurants and hotels throughout every state and congressional district of the USA.

"Hunters have an unequalled passion for their outdoor traditions, spending 220 million days in the woods, fields and wetlands each year and nearly \$2,000 per person on firearms, ammunition and other equipment and services," said Doug Painter, president of the National Shooting Sports Foundation. "That's \$23 billion pumped into the economy, benefiting not only the manufacturers of hunting-related products, but everything from local mom and pop businesses to wildlife conservation in every state in America."

Despite the recent rise in fuel costs, hunters and anglers remained immune to jumps in gas prices, spending a total of \$1.8 billion in motorboat fuel on hunting and fishing activities.

"Boating plays a larger role in hunting and fishing than people realize, especially in terms of money spent and participation," noted Thom Dammrich, president of the National Marine Manufacturers Association. "Figures from the USFWS survey estimate that sportsmen spend more than \$11 billion on boat fuel, boats and related equipment to get them out on the water."

The report, "Hunting and Fishing: Bright Stars of the American Economy ~ A force as big as all outdoors," uses the results from the USFWS 2006 National Survey of Fishing, Hunting and Wildlife-Associated Recreation and compares hunters' and anglers' impact on the economy with other industries.

"This report clearly demonstrates the tremendous impact that sportsmen and women have on their communities, the economy, the environment, and even on politics,"

said U.S. Rep. Ron Kind, avid sportsman and co-chair of the Congressional Sportsmen's Caucus. "Their presence is too great to be ignored by policymakers in Washington, DC, and I urge my colleagues in the House and Senate to look at this report and make sportsmen's issues a priority."

These latest figures continue to demonstrate that by any measure, hunters and anglers are among the most prominent and influential of all groups. Lawmakers and regulators make decisions every day that affect sportsmen. After the last two presidential elections, it has become clear that hunters and anglers are an active voting constituency. Hunters and anglers pay attention, and take those decisions into account when they vote.

While recent media attention has focused on the small decreases in licensed sportsmen, the CSF report focuses on the economic powerhouse of hunters and anglers and how they compare to other sectors of the economy.

It is a fairly simple equation: hunters and anglers mean jobs and tax revenue in every state and congressional district of the country," stated Crane. "The economic impact and sheer size of sportsmen as a constituency are facts that every lawmaker should pay attention to."

"Auto manufacturers are well aware of this demographic's tremendous economic impact," said Dave McCurdy, president & CEO of the Alliance of Automobile Manufacturers. "Hunters and anglers are among our largest consumer groups for pick-up trucks and SUVs and because those vehicles best meet their needs. In fact, in 2006, for the fifth year in a row, sales of these larger vehicles exceeded passenger car sales."

The report is available at: www.nssf.org. ✧

Spotted muskies stocked in Green Bay

Wisconsin's effort to reintroduce Great Lakes strain muskellunge to Green Bay and the Winnebago system already has anglers catching bragging-size muskies, and those popular fisheries got a boost last month as nearly 900 large yearling fish were stocked at about a dozen sites.

The musky, also known as "spotted" musky, were stocked in the Fox, Menominee, and Peshtigo rivers, in Green Bay, Sturgeon Bay, and Sand Bay. Also in Little Sturgeon Bay, Suamico, Little Lake Butte des Morts, and Pensaukee, Poygan, and Butte Des Morts lakes, according to Mike Donofrio, Department of Natural Resources fisheries supervisor at Peshtigo.

The fish are 20-24" long, having grown bigger at the old Wild Rose State Fish Hatchery while awaiting the green light for stocking.

They were originally planned for stocking at a smaller size in spring 2007, but were kept at the hatchery longer to assure they were free of a new deadly fish disease, viral hemorrhagic septicemia, or VHS. ✧

IL Youth Goose Hunt app deadline Dec. 7

Youngsters are encouraged to register for the 7th annual Illinois Youth Goose Hunt, scheduled for Dec. 26-27. Sponsored by the IDNR, the youth goose hunt will be held at private waterfowl hunting clubs in Peoria, Fulton and Knox Counties. Participation is limited. Youth hunters will be selected by a lottery drawing from all youth who phone in to register by Dec. 7.

First-time applicants will be given a priority over previous participants in the drawing. Youth hunters selected will be notified by mail. The hunt is open to youngsters ages 10-15 at the time of the hunt. To register for the hunt or for more info,

call Joe Robinson at 217-785-8060 8-5 p.m. weekdays. ✧

COs bust caviar ring

Most would not view the Hoosier homeland as the base of an illegal six-figure-per-year seafood operation but that's what Indiana Conservation Officers found on the tributaries of the Ohio River, in Vevay. COs infiltrated the ring, the members of which were illegally harvesting and selling caviar from the river's paddlefish.

Twelve arrests were made on a combined 39 felony charges. A charge of "illegal sale of a wild animal" was included in each individual's list of charges. Officers also confiscated four boats, three vehicles, processing equipment, fishing equipment and records. Illicit drugs and large sums of cash were also taken from some of those arrested.

Technically, caviar is sturgeon eggs; however, there is a shortage of sturgeon in the Caspian Sea, the main source for the culinary delicacy. That has created a lucrative worldwide market for paddlefish eggs, which have a similar taste, look and consistency to the real thing. One paddlefish can yield \$600 to \$800 in eggs. Annual income for illegal harvesting is \$100,000 to \$400,000 per year per fisherman. ✧

Five take center stage at Fishing Hall of Fame

The spotlight on October 21 was on five new members being inducted into the Fishing Hall of Fame. The class of 2007 included lady fly angler and instructor Joan Salvato Wulff, dean of outdoor writers Homer Circle, rod-maker Gary Loomis, and a duo of extraordinary billfishermen consisting of Dr. Ruben Jaén and Capt. Peter B. Wright.

The weekend also paid homage to the 65 Hall of Fame members who are currently enshrined including Ernest Hemingway, Zane Grey, Curt Gowdy, Ted Williams, Michael and Helen Lerner, Philip Wylie, Johnny Morris, Don Tyson and John Rybovich. ✧

Anglers face heavy fines

Anglers from Colorado, Illinois, Indiana, and Florida face \$14,000 in fines and restitution for more than the legal limit of fish in Minnesota. A call to the Turn In Poacher (TIP) hotline led DNR officers to four fisherman in possession of 240 perch over the legal limit. The legal limit for perch in Minnesota is 20 per day and 40 in possession.

COs visited the resort cabin the men were staying in at Woman Lake near Hackensack, where they discovered 23 packages of frozen fish. An additional 14 bags of frozen fish was found in the resort office freezer.

==Peter Vandernoord, 90, Dyer, Ind.; Clarence D. Landhuis, 79, Orlando, Fla.; and Herbert V. Weele, 78, and John Templeman, 76, both of Lansing, Ill. are each charged with possessing 60 perch over the legal limit, a gross overlimit of fish. Fine and restitution could total nearly \$2,000 for each man. If convicted they could lose their fishing licenses for three years. No trial date has been set. ✧

Boaters to benefit from dredging projects

Recreational boaters will notice improved waterway navigation at four sites on Lake Erie thanks to more than \$878,000 in Recreation Harbor Evaluation Program grants, awarded by the Ohio DNR.

The largest award is \$366,000 for dredging of the marina and navigation channels leading to Lake Erie from the Conneaut Lagoon Access. Other grant awards include more than \$364,000 to dredge recreational navigation channels leading to Lake Erie from the Vermilion Lagoons Access in Lorain County. A grant of more than \$210,000 went to the City of Huron for dredging the municipal boat basin. The City of Rossford in Wood County received more than \$161,000

for excavation of the Rossford Marina basin. ✧

NMMA backs Recreational Boat Act

The Recreational Boating Act, designed to protect recreational boaters from new commercial ballast water permitting regulations, was introduced in the U.S. Senate. U.S. Sen. Mel Martinez, R-Fla., last week introduced the Senate version of H.R.2550. "Requiring family boaters to secure a Clean Water Act permit so they can wash their boat, fish or go water skiing is ridiculous," Martinez said in a statement. "This permit requirement is unnecessary and onerous."

For 34 years the EPA has exempted discharges from recreational boats from the Clean Water Act permit system. However, a recent court ruling (Sept. 26 U.S. District Court) intended to address the ballast water permitting issue cancelled this exemption. "Without congressional approval of the Recreational Boating Act, the court's existing decision means that everyday boaters will have to apply for the same expensive permits as ocean-going commercial vessels," said Thom Dammrich, president of the NMMA. Large ocean-going vessels are blamed for some 10,000 invasive species introduced into U.S. waters.

NMMA is strongly backing passage of the Recreational Boating Act of 2007 and encourages the public to take action before the ruling goes into effect next year. A court-mandated deadline is set for September 2008, which would require the EPA to have the permitting requirements in place. "We now have the enormous task ahead of passing a legislative fix before time runs out," said Dammrich. ✧

Marine Community Day & Dinner

Marine Community Day will again be held in Cleveland at the Crowne Plaza, on February 20-21.

On-line registration is available at: www.greatlakes-seawayreview.com. More details to follow. ✧

Congress recognizes importance of hunting and fishing

Last month Congress marked the first ever Congressional Sportsmen's Week in the U.S. Congress, serving as a reminder to legislators of the vital importance hunting, fishing, and outdoor recreation have on America's economy, environment, health, and way of life.

The week included passing resolutions recognizing hunting and fishing and its contributions. ✧

Clean air pact to cost AEP over \$4.6 billion

It will cost giant utility American Electric Power more than \$4.6 billion to comply with a settlement with the feds to reduce air pollution from 16 coal-burning power plants, the EPA said. In what the EPA called the single biggest environmental enforcement settlement in U.S. history, Ohio-based AEP agreed to end an 8-year lawsuit brought by the federal government for alleged violations of the Clean Air Act.

AEP also agreed to pay \$15 million in civil penalties and \$60 million in pollution cleanup costs to end the "new source review" case brought by the feds in 1999. ✧

Old missile site now part of wildlife refuge

A 50-acre former missile site on Grosse Ile will become part of the Detroit River International Wildlife Refuge, under an amendment approved by the U.S. Senate. A second proposal approved by the Senate and authored by Michigan U.S. Sen. Carl Levin, D-Detroit, will authorize a land exchange between the city of Detroit and the U.S. Coast Guard along the Detroit River waterfront, which will allow the Coast Guard to improve their operations and enable the city to connect two segments of the riverfront walk. ✧

State Cops propose age ban on firearms

The Illinois State Police have submitted a proposal to the Joint Committee on Administrative Rules (JCAR) that would end firearm safety education and shooting activities for anyone under 10 years of age. The proposal, which must be approved by JCAR, would forbid parents from obtaining Illinois Firearm Owner Identification (FOID) cards for their children under age 10.

If this proposal were to become law the state would dictate to parents how and when they could pass along our history, heritage and culture to their children. No hunting. No safety education and training. No shooting sports. What's more, the proposal could force parents to store their firearms only in a manner authorized by the state.

This regulation would do nothing to curb crime and only endanger children, as parents would have to delay firearm safety education until their children were older. Furthermore, according to the National Safety Council, firearms accidents involving children are at an all-time low, less than 1% of all accidental fatalities in the United States.

Prior to considering proposed regulations, JCAR must observe a 45-day public comment period during which citizens may submit their views on the proposal, in writing, to JCAR. ✧

More than cormorants overhead?

The Lake Huron Fishing Club reports the United States Air Force has notified the Ontario Ministry of Natural Resources that they have re-activated a 40 year old "live fire practice area" in the center of Lake Huron. This 94 km x 37 km militarily restricted zone straddles the 6 Fathom Bank and north end of Yankee Reef. Few of us fish this far out, but anyone crossing the lake would be wise to take caution. ✧

Agency to test ballast treatment in Superior

A chemical treatment system that is designed to kill living organisms in ships' ballast and then is rendered nontoxic is the subject of some testing being conducted at the Great Ships Initiative in Superior. The chemical treatment, called Seakleen, is manufactured by Cleveland-based Hyde Marine Inc. Tests began last month at the Superior facility that was built earlier this year to test methods to kill invasive species in ballast.

Seakleen has been tested for more than nine years, including on ocean liners and freighters. Company literature claims the treatment is a "natural biocide" that has been 100% effective at removing all organisms larger than 50 micrometers. That's enough to kill zebra mussel larvae, cholera and E. coli. ✧

No ruffe captured during fall survey

No Eurasian ruffe were captured during a netting survey conducted in the Thunder Bay River and surrounding areas near Alpena, MI in late September. Small-mesh gillnets were used during the annual survey which targeted ruffe in areas where the invasive was once found. This is the fourth consecutive year that ruffe have not been captured.

The Eurasian ruffe was first found in the Great Lakes in Lake Superior during the 1980s. It is believed that ruffe may have become extirpated from the Thunder Bay area and Lake Huron based on survey findings from 2003 to present. We are unsure why ruffe have disappeared from the area but believe it may be related to the subsequent invasion of the round goby, another aggressive bottom dwelling invasive, and/or our removal efforts. The possible extirpation of ruffe is a remarkable outcome considering established invasive species generally become a part of the fish community into the future. Ruffe continue to persist in

Lake Superior and in the Green Bay area of Lake Michigan. ✧

CG urges competency and safety checks for boaters

A report from Rear Adm. Brian Salerno, assistant commandant for marine safety, states that during the commandant's testimony on the challenges facing the Marine Safety Program before Congress on August 2, 2007, Adm. Thad Allen promised to deliver a plan to improve the Coast Guard's Marine Safety Program. This plan has been delivered to Congress and can be viewed under The Marine Safety Missions tab on homepage at [Http://homeport.uscg.mil](http://homeport.uscg.mil).

The cornerstone of the plan is a strategy to enhance the capacity, responsiveness, and effectiveness of the Marine Safety Program. Three characteristics shape the current status and needs of the Coast Guard's Marine Safety Program. First, the core processes, authorities and practices used in the Marine safety effort are sound. Second, the program requires a targeted revitalization to add the resources needed to build and sustain CG capacity. Third, the CG's collaboration with industry requires enhancement to ensure that open, two-way communications effectively guide programmatic improvements. ✧

Regional Navigation Meeting Nov. 27

You are invited to attend the next Great Lakes Navigation Stakeholder meeting. There is now a call-in conference line option available for those who are unable to travel to Detroit. **Meeting details:** Tues., Nov. 27, 2007, 8:30-1:00 PM Detroit Metro Airport Marriott Hotel 30559 Flynn Rd., Romulus, MI 48174 (800) 228-9290 or (734) 729-7555 <http://marriott.com/dtwrm?groupCode=glnglnb&app=resvlink> Free Parking available at the hotel Dial-in Number: (866) 818-1758 Pass Code: 893450

For info on Great Lakes Navigation Team activities:

www.lre.usace.army.mil/greatlakes/navigation ✧

Survey results bode well for Leech Lake anglers

Anglers who visit Leech Lake, MN in the coming years should expect some good fishing, according to Harlan Fierstine, MN DNR fisheries supervisor in Walker. His prediction is based upon the results of recent fall test netting conducted by the DNR. According to the results, walleye and yellow perch populations have increased dramatically over the last two years.

The DNR reports that both the 2005 and 2006-year classes are abundant. September gill nets showed an abundance of 11- to 13-inch walleye from the 2006-year class and many 15- to 16-inch walleye from the 2005-year class. The strong 2005 and 2006-year classes should translate into good catch rates of 12- to 18-inch fish next spring.

DNR test nets also captured good numbers of walleye 18-26". These fish are currently protected by special fishing regs on Leech Lake, and will continue to provide quality angling opportunities in coming years.

Lakewide, walleye counts in DNR test nets averaged 13.1 walleye per net lift, the second highest number since annual surveys began in 1983. The long-term average for Leech Lake is 7.5 walleye per net lift. ✧

Wild Ohio TV show now online

Popular series to air on-demand on www.MyOutdoorTV.com

Wild Ohio, the Ohio ODNR's popular television program, is now available on the Internet for viewing on-demand at MyOutdoorTV.com.

Wild Ohio features hunting, fishing, and wildlife interest stories specific to Ohio's great resources. The program currently airs on some public broadcasting outlets, but is not available in all parts of the state. Now, viewers can see Wild Ohio anytime by simply going to wildohio.com and clicking on the

"Watch Wild Ohio Television Now" button. ✧

MN survey shows fewer participating in outdoor recreation

Recent national surveys show troubling declines in what once were the bread and butter activities that defined people who lived in this state. These declines are also not unique to Minnesota. They are occurring across the country.

Apparently, nature based outdoor recreation does not have the priority in younger people's lives that it once did. What's replacing traditional outdoor recreation? While much remains unknown, likely candidates include television, computer gaming, and over-programmed lifestyles. According to the surveys, these declines appear likely to continue, given how broad-based they are.

The Minnesota DNR is devoting its draft State Comprehensive Outdoor Recreation Plan (SCORP), to this topic. The plan has one goal – increased participation in outdoor recreation. This document also provides guidance to outdoor recreation decision makers and managers on policy and investment

matters.

The DNR is also partnered with Twin Cities Public Television to produce a one-hour exploration of these declines in nature-based outdoor recreation and its impact on society. The show aired on TPT 17 on Saturday, October 27 at 8 p.m. and highlighted a mix of experts and citizens talking about these trends and what they might mean. Deeper exploration of the research shows the declines are most closely associated with the 16 - 44 year-old age group, which includes Generations X and Y, the latter to which is also referred to as the Millennial Generation.

Additionally troubling is the 16-44 year-old age bracket is the generation that traditionally passes outdoor recreation experiences on to children. Who will do this now? Anecdotal data points to the growing role grandparents are playing in sharing outdoor recreation experiences with grandchildren.

What are some of the

implications of declining participation? A 2006 survey by the United Health Foundation found that while Minnesotans are generally healthier than the rest of the country, Minnesotans share the phenomenon of growing fatter. The survey indicated people who live in this state have witnessed a 132% rise in the obesity rate since 1990. Obesity is a key predictor of future health problems including diabetes. In addition to physical health, there are troubling indicators that our mental health is suffering too.

Richard Louv, in his best-selling book, "Last Child in the Woods," sites a relationship between growing mental health problems such as anxiety and depression and the loss of connection with nature. How should people respond to this trend? There are a lot of independent efforts going on in schools, with our health care providers, and many other places, all focused on changing these troubling trends. ✧

Wisconsin Circuit Court sides with gun owner

On September 24, the 31st Circuit Court of Milwaukee ruled the Concealed Carry Weapons (CCW) statute was unconstitutional, in this case, a pizza delivery driver who carried a gun for self-defense on the job, after being robbed repeatedly in a high crime area.

Andres Vegas is a pizza delivery driver and had been robbed and mugged while delivering a pizza on four occasions. The first time was in March 2005. The second time was July 14, 2006, when Vegas was attacked and threatened at gunpoint. Vegas, armed with a firearm, exercised his right of self-defense and shot one of the assailants.

Vegas was not charged with the crime of carrying concealed and was ruled as acting in self defense. Not only was his firearm confiscated at the time of arrest, but it was never returned. He was subsequently told by the prosecuting District Attorney

that if he were to use a firearm in self-defense again he would be prosecuted.

On September 13, 2006, an unarmed Vegas — acting under the orders of the District Attorney to avoid prosecution — was robbed, beaten, and sprayed with pepper spray by three assailants. Consequently Vegas went out and purchased another firearm. On January 4, 2007, Vegas was again attempting to deliver a pizza when two men approached him and pointed a gun in his face. This time, he responded by again exercising his right to self-defense and shot his assailant in the hip. Vegas then secured his assailant's firearm along with his, placed them both on the roof of his car, dialed 911, and waited for the police to arrive. The DA determined that he acted in self defense, but he was subsequently charged with CCW for the moments

before he was assaulted and defended.

Even though this charge was brought forward by the DA's office, the court has ruled in favor of Vegas, saying: "Vegas has demonstrated the requisite extraordinary circumstances that warrant his concealed weapon ... Vegas legally purchased his firearm for the purpose of security and protection. There is a strong inference that Vegas' firearm has saved his life during these violent assaults ... Vegas has a substantial interest in being secure and protecting himself by carrying a concealed weapon."

"This Court is not convinced that there are any reasonable alternatives that would have secured Vegas' safety. Vegas' concealed weapon has most likely saved his life on several occasions; this the State cannot ignore. The State has conceded that Vegas did not have an unlawful purpose for concealing a weapon.

This Court thus grants the
Defendant's motion to dismiss." ✧

Feds to help fight VHS fish virus

The USDA's Animal and Plant Health Inspection Service have made \$1.5 million available to control the deadly VHS fish disease in the Great Lakes and surrounding states. The funding will focus on education, testing, and surveillance and compliance efforts to prevent the spread of viral hemorrhagic septicemia. U.S. Senators Carl Levin and Debbie Stabenow, D-Mich, announced the funding.

The contingency funding provided by APHIS will support upgrades at the USDA National Veterinary Services Laboratories to improve testing, surveillance and compliance support efforts in coordination with state and tribal agencies in the Great Lakes watershed, and an educational campaign to prevent the spread of VHS. ✧

New NRA site for hunters' rights

The NRA has launched a new Web site devoted to hunters' rights.

All factors that affect your freedom to hunt, and the future of the sport itself, will be addressed at www.nrahuntersrights.org.

The site will not tell you how to hunt, where to put your tree stand or what the best guns and loads are for your favorite species. Many Web sites and magazines can already tell you all that. The site will alert you about threats to hunting and NRA's efforts to combat them — our direct lobbying efforts at every level, our hunter recruitment and instruction programs and our funding of conservation and range improvement projects. If a new range opens in your state, if a season is extended or added, or if a youth mentored hunt is instituted, you'll read about it at www.nrahuntersrights.org. With limited time and resources, hunters need to know about every new opportunity, place to hunt, or new season available. ✧

Spiny waterfleas still spreading on border waters

The invasive spiny waterflea continues to spread and become more abundant along the U.S. - Canada border waters. In response, the Minnesota DNR has designated several additional waters as "infested waters." Spiny waterfleas are now very abundant in Rainy Lake, Rainy River and Lake of the Woods that were designated earlier in the year.

In St. Louis County, newly designated infested waters are Crane Lake, Kabetogama Lake, Little Vermilion Lake, Sand Point Lake, and a portion of the Ash River, upstream of Kabetogama Lake. In Cook County, Caribou Lake located in the Boundary Waters Canoe Area Wilderness just west of Pine Lake is now designated as an infested water. Also in Cook County, a DNR fisheries crew from Grand Marais recently found spiny waterfleas in Gunflint Lake and suspects they could be in other waters connected by the Granite River. ✧

Exec Order protects striped bass, red drum

President Bush on October 20, 2007, signed an Executive Order establishing gamefish status for striped bass and red drum in federal waters, moving another step forward in conserving two of the most popular game fish in the United States.

This Executive Order has the full support of the sportfishing industry. By signing the order, the President sends the right message about the need to ensure that striped bass and red drum endure as a species and as sport fish to be enjoyed by anglers now and for generations to come. The Order directs the Commerce and Interior Departments to put regulations in place to establish gamefish status for red drum and striped bass in federal waters. Due to intense over fishing, both striped bass and red drum were nearly decimated in the 1970s and into the 1980s. ✧

Repairs to Cheboygan Lock and Dam underway

Repairs to the Cheboygan Lock and Dam have begun. During construction, Michigan DNR personnel will work with the Great Lakes Tissue Company, owner of the powerhouse, to regulate the flow of water around two temporary structures that will be built to protect the on-site workers and the property above and below the dam.

The dam was originally built in 1845. In 1967 ownership of the dam was transferred from Consumers Power Company to the DNR.

Although the dam is operating properly, damage due to erosion needs to be repaired. Construction will include the removal and replacement of components of the dam, repairs to abutments, replacement of the spillway deck, a new barrier-free walkway and approach platforms, replacement of stone in the plunge pool, new shoreline rip rap and site work that will include fencing, lighting, fish habitat structures, walkways and grading. ✧

Water Bill approved

Continued from page 1

The \$23 billion bill is loaded with regional and national water improvements — and some pork, but the bill only authorizes the projects, it does not pay for them.

Getting the money appropriated is another battle legislators and conservationists face now that this one is racked up in the win column. ✧

OH - Poachers fined \$28,000

Eight men from Ohio and Michigan charged with wildlife code violations, including taking hundreds of walleyes over their limits from the Maumee River during the last two spring runs, have been fined \$28,000 from two municipal courts. ✧

Avoid the six most common winterizing mistakes

Free BoatU.S. Winterizing Guide available

With winter approaching BoatU.S. Marine Insurance has reviewed its claim files and reports the following six most common mistakes made when winterizing a boat:

1. Failure to winterize the engine: Freezing temperatures occur in all 50 states and while they are taken seriously up north, it's the balmy states of California, Florida, Texas, Alabama and Georgia where boaters are most likely to have freeze-related damage to engine blocks. It routinely occurs to boats stored ashore here. Boats left in a slip are less susceptible to sudden freezing as the surrounding water retains heat longer than air.
2. Failure to drain water from sea strainer: If your winterizing plan calls for draining the engine, the seawater strainer must be winterized or

residual water could freeze and rupture the watertight seal. Sometimes you won't know it's damaged until spring launching and water begins to trickle in.

3. Failure to close seacocks: For boats left in the water, leaving seacocks open over the winter is like going on extended vacation without locking the house. If a thru-hull cannot be closed the vessel must be stored ashore – the sole exception are cockpit drains. Heavy snow loads can also force your boat under, allowing water to enter thru-hulls normally well above the water line.

4. Clogged petcocks: Engine cooling system petcocks clogged by rust or other debris can prevent water from fully draining. If one is plugged, try using a coat hanger to clear the

blockage or use the engine's intake hose to flush anti-freeze through the system.

5. Leaving open boats in the water over winter: Boats with large open cockpits or low freeboard can easily be pushed underwater by the weight of accumulated ice and snow. Always store them ashore.

6. Using bimini covers as winter storage covers: A cover that protects the crew from the sun does a lousy job protecting the boat from freezing rain and snow. Unlike a bona fide winter cover, biminis tend to rip apart and age prematurely by the effects of winter weather.

To get a free copy of the Winterizing Guide go to: <http://www.BoatUS.com/Seaworthy> and click on "Winterizing Your Boat," or call 800-283-2883. ✧

BoatU.S. offers tips on ethanol fuel, winterizing

What you need to know about E-10 ethanol fuel and winter boat lay-up

Last year recreational boaters in most parts of the country were introduced to gasoline containing higher concentrations of ethanol, a corn-based additive that replaced a known carcinogen, MTBE. The new fuel, dubbed "E-10" for its 10% ethanol content, unfortunately has the ability to attract greater amounts of water and "phase separate," or form two separate solutions in the gas tank, usually over a long period of time. Once this happens, the engine may not run and internal damage can occur.

Many boaters and anglers are asking how they can avoid winter fuel problems. BoatUS has these recommendations, some of which were gleaned from midwestern marina owners where E-10 has been in use for over a decade:

- The best practical recommendation is to continue to top off a boat's fuel tanks to about 95% full, leaving room for expansion. A tank that is almost full limits the flow of air into and out

of the vent, which reduces the chance of condensation adding water to the fuel. Anglers who fish over the winter should also top off their boat's gasoline tanks between outings to prevent condensation.

Note that some mechanics mistakenly advise that leaving a tank partially filled allows you to "freshen" the old fuel by topping off the tank in the spring. Leaving a tank partially filled with E-10 invites phase separation, which cannot be remedied by adding fresh gasoline. Once E-10 phase separates, the water will remain at the bottom of the tank. Midwest marina owners report that phase separation typically occurs when boats were stored with tanks only one-quarter to one-half full.

- Draining fuel tanks of E-10 gas, while completely eliminating any chances of phase separation, is potentially dangerous and not recommended.

- Once phase separation occurs in E-10 gasoline, additives and water

separators can't help. The only remedy is to have the gas and ethanol/water professionally removed from the tank.

- Ethanol is known to chemically react with fiberglass fuel tanks, which can cause them to deteriorate and potentially fail. This is most common with tanks built before the mid-1980s. Unless your boat's manufacturer can confirm that your tank was built to withstand ethanol, the only remedy is to not use E-10 gas (which may not be possible) or to replace the tank with a non-reactive material such as aluminum.

- While ethanol does attract moisture; never try to plug up a fuel tank vent to prevent moist air from entering a tank. Without room to expand, the additional pressure could rupture fuel system components.

- With any fuel that sits in a tank for a long time, it's important to add a stabilizer. But understand that stabilizers do not prevent phase separation. ✧

