### **Light Up!**

By Pepper Shields, Park Ranger



Many adjacent property owners at Thurmond Lake have expressed an interest in installing power to their docks, or perhaps just having a light placed near their dock. As outlined in the 2001 Thurmond Shoreline Management Plan, electrical installations are allowed on Public Lands in locations zoned "Limited Development".

The first step would be to obtain a permit for a Power Line Installation and an Electric Certification Form from your area Park Ranger. Residents of McCormick County, South Carolina, are required to obtain appropriate permits from the County before permits from the U. S. Army Corps of Engineers can be issued. Permit

holders have one year from the date of issue of the permit to install and have the power service checked and certified by a licensed electrician. For the safety of everyone involved, all power installations on public property must meet or exceed the requirements of the National Electric Code.

Upon reissue or reassignment of Shoreline Permits, the electric installations must be checked and recertified again. If you are interested in, or need further information on electric installations on public land adjacent to Thurmond Lake, please contact the Thurmond Lake Office at 1-800-533-3478.

### The Importance of Being Reflective

By David Quebedeaux, Park Ranger

As summer 2007 fades into a fond memory, dock owners should examine the state of the reflectors on the corners of their docks. Owners of boat dock permits are encouraged to supply, install and maintain at least four, three-inch by three-inch, international orange, red or white reflectors on their dock. To ensure the reflector is visible to boat traf-

fic, it is recommended that reflectors be placed on both sides of the dock. Reflectors should be attached on the lower level of covered docks.

Dock reflectors serve two significant purposes. First, these inexpensive reflective plastic or adhesive pieces alert nighttime



boaters of docks lining the shore. A boat versus dock collision can be expensive and deadly. Second, the reflectors are important to boaters so they can find the correct location of the dock at night. Docks with an unusual array of more than four reflectors serve as good landmarks to the boater navigating at night.

Over time, reflectors fall victim to weather, bumping boats, and vandals. Many of the currently available reflectors are applied with adhesive. The adhesive can eventually fail and the reflector is lost. Plastic or reflective tape is also a common adhesive for reflectors. Building supply stores, hardware stores, and large department stores usually stock these easy to apply little helpers.

Reflect on your dock's reflectors. Help yourself to remain safe around your dock. Replace missing reflectors today.

> of Engineers® US Army Corps



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Clarks Hill, S.C. 29821 510 Clarks Hill Highway J. Strom Thurmond Resource Office Resource Manager





Fall 2007

### **LOW LAKE LEVELS!**

**Drought Impacts** 

Many of us are accustomed to seeing lakes under normal weather conditions and normal operating procedures, making it easy to forget that Thurmond Lake was built as a multi-purpose project. The J. Strom Thurmond Lake was authorized and constructed for flood damage reduction, hydropower, downstream navigation, water supply, water quality, fish and wildlife habitat, and recreation. Today the lake remains a multi-purpose project – operating for the benefit of the American people. It is important to remember that the three reservoirs in the Savannah River Basin, Hartwell, Richard B. Russell and J. Strom Thurmond, operated by the U. S. Army Corps of Engineers-Savannah District are operated as one system and actions taken at one affect the other two, as well as the Savannah River downstream, all the way to the Atlantic Ocean.

With growing popularity, increased visitation, and continuous development pressures, the balancing act to meet authorized purposes and maintain customer satisfaction becomes increasingly more difficult. During drought conditions, the Corps follows the Savannah River Basin Drought Contingency Plan. This plan attempts to balance the negative impacts of the drought. The Corps recognizes the competing interests among project purposes – fish and wildlife management, hydropower, navigation, recreation, water quality and water supply – and the possibility that they may not all be fully satisfied. To assist in a better understanding of the management of Thurmond Lake, the Corps has responded to several of the most frequently asked questions during Lakes are drawn down this drought.

Q. I keep hearing rumors that the Corps is going to drop Thurmond Lake a substantial amount to perform work on the dam – is this true?

A. No! Unfortunately, this same rumor (depths and reason vary) spreads every time the lake begins to drop. The lake level has dropped due to the drought; it has not been intentionally drawn down for maintenance work or other reasons.

Q. Why is the lake level at Russell Lake higher compared to Hartwell and Thurmond Lakes?

A. Many people have noticed that the lake level of Russell Lake has not fluctuated much, whereas Hartwell and Thurmond Lakes have dropped considerably. What this comes down to is the design pools of the lakes. When a reservoir and dam are designed and built, certain factors are determined such as the full pool elevation, the amount of flood storage, and to as design drawdown. Conservation storage or 4,000 cubic feet per second (cfs) on average per week

design drawdown refers to the amount of water that is usable. This water can be used for the authorized purposes outlined earlier. The conservation storage at Thurmond Lake is 18 ft. to elevation 312 ft. mean sea level (ft. msl).

Thurmond Lake was completed in 1954 as the first major storage project on the Savannah River. The completion of Hartwell Dam in 1962 lessened the conservation storage demands on Thurmond Lake and led to designation of the Thurmond conservation pool of 18 ft. (312 ft. msl).

The determination of the design drawdown at Hartwell was made based on economic calculations and the need for stored water during droughts of record. The topography at Hartwell Lake is steeper than at Thurmond; therefore, there is less mud bottom exposed for each vertical foot of drawdown. Russell Dam was designed after Thurmond and Hartwell had essentially satisfied the need for conservation storage on the Savannah River. Russell could be designed to operate more efficiently by minimizing the drawdown, and satisfied the national cost benefit analysis with only a 5-ft. fluctuation. What this means is Russell Lake will not drop below 5 ft. of its full pool elevation of 475 ft. msl. If a lake drops below its conservation storage (into "dead storage"), water of poor quality is released – the water is typically low in dissolved oxygen and high

in sedimentation. The Corps attempts to draw Hartwell and Thurmond Lakes down equally (usually within a foot) for the first 15 feet. Below this point, Hartwell and Thurmond evenly based on the percentage of water remaining in each lake.

Thurmond 321.54 ft-msl, 19 Sep 08:00:00 Q. How are generation schedules determined? Thurmond is 8.46 feet down from full pool. 1952550 AC-FT, 46.7% Conservation Sto A. The Corps of Engineers

Southeastern Power Administration (SEPA) of the amount that is available in each dam. Availability is determined by various factors including current and predicted lake levels, drought condition action levels, rainfall/weather predictions, fish spawning, and conditions at downstream projects. SEPA uses this information and power contract commitments to determine generation schedules. During drought conditions, power generation is reduced in accordance with the reduced discharge amounts specified in the Savannah River Basin Drought Contingency Plan. The Corps is currently operating under Action Level the amount of conservation storage - also referred 2 of the plan - Thurmond discharges are limited to

Water Management Branch in Savannah informs the

Russell 475.04 ft-msl, 19 Sep 08:00:00 Russell Guide Curve = 475.00

Russell is - 0.04 feet down from full pool. 027387 AC-FT, 99.2% Flood Control S

and Hartwell discharges are reduced appropriately to maintain balanced lake levels.

Q. Why does the Corps continue to generate during a drought?

A. The Corps of Engineers must discharge a minimum of 3,800 cfs on average per week as required under agreement with the States of Georgia and South Carolina to meet water quality and water supply requirements on the Savannah River below Augusta, Ga. Although the three lakes supply water to many communities and industries in the upper Savannah River Basin, there are many more water users below Augusta. Maintaining the proper stream flow also prevents saltwater intrusion (saltwater backing up river) into the delicate estuaries in the Savannah area.

Water is always released through the turbines under normal conditions. Water released through the turbines can be controlled and monitored, and used to produce power, which is an added benefit. In extreme conditions, water may be released through the floodgates (also referred to as tainter or spillway gates) to meet downstream release requirements. Hydropower generation is strictly incidental to the release of water for other purposes once Action Level 3 of the Savannah River Basin Drought Contingency Plan is reached. (Action Level 3 is reached when Hartwell Lake reaches

> elevation of 646 ft. msl or Thurmond Lake reaches 316 ft. msl). If level 4 (bottom of conservation storage) is reached then outflow only equals inflow.

> From the Savannah River's headwaters in North Carolina to its mouth at the Atlantic Ocean, the professionals of the Corps of En-

gineers manage the river system round the clock to ensure the best use and protection of the water re-

While the Corps is unable to put an end to the drought, our technical specialists work closely with local, state, and other federal agencies to ensure fair treatment to all users of the reservoirs and dams along the river. Our water managers must balance the many, often conflicting, needs of the river. During any drought, this balance becomes more critical and difficult.

You can learn more about the impact this drought has on the Savannah River from our web site. Please visit us at http://www. http://www.sas.usace.army.mil/



By Ken Boyd, Conservation Biologist

As the summer begins to fade into fall, many folks in the south start thinking about deer hunting. In the south, fall deer hunting is almost considered a right of passage for many. It is an opportunity for father and son or father and daughter to spend time together in the great outdoors, enjoying the hunting experience. What many hunters in the Central Savannah River Area aren't aware of is the great resource that is right in their own backyards. While most people are fully aware of the 70,000 plus-acre lake available for their recreational enjoyment, many don't realize that the J. Strom Thurmond Lake is surrounded by almost 80,000 acres of public land.

Although the entire 80,000-acre land base is not available to the public for hunting, there are many areas managed for native game species around Thurmond Lake. One such area of particular interest to many hunters is Bussey Point located in Lincoln County, Georgia. This 2,545-acre management area provides habitat for big game species such as whitetail deer and Eastern wild turkey. Every year, the U.S. Army Corps of Engineers opens the Bussey Point Management Area to hunting enthusiasts during special, managed hunts.



During the Fall 2007 deer season, the Corps of Engineers will host archery and muzzleloader hunts for the public. Bussey Point will be opened for archery only hunts on September 21 and 22, as well as October 21. Muzzleloader hunts are scheduled for October 13 and November 16 and 17, and are limited to 100 hunters per day, registered on a first-come/first-serve basis. Archery hunters are invited to participate in all scheduled hunts. Hunters may take up to two does and one quality buck during each hunt. Quality bucks are those having racks four points or better on at least one site, or having a 15-inch or greater outside spread.

For those hunters seeking the full outdoor experience, camping will be available in the camping area adjacent to the check station. Don't miss an opportunity to relax with family and friends following a day in the field, enjoying a warm campfire and sharing tales about those great bucks. Campsites are available on a first-come/first-serve basis. Mark your calendar now to take part in this annual southern tradition. For more information, contact Ken Boyd, Conservation Biologist, at the J. Strom Thurmond Project Office, 800-533-3478, ext. 1159.



By Jay Weidman, Park Ranger

A really hot, smoking summer is over. You've been spotted at the lake frequently since fishing fever hit hard in early spring. Stripers, hybrids, bass, crappie, an occasional catfish and maybe a few bluegills that you caught with your wife and kids (If you didn't take your wife and kids fishing, shame on you!) now fill a bunch of your freezer space. Fish, interspersed with hot dogs, hamburgers, and other assorted fast food have been a summer staple in the family diet.

But, everyone is clamoring for a change. You don't find shopping for supermarket fare fun "cause it doesn't get you outside much unless you count to and from the car and being jostled in a crowded parking lot fun". So, what's left? "It's wabbit season!" as Elmer Fudd used to say.

Seriously, most of the Army Corps of Engineers-managed land around Thurmond Lake is open to the public for hunting. Starting early with doves in September, the avid outdoorsman can hunt something or another until time to start fishing the following spring. Squirrels are usually plentiful and are a great primer for you, the kids and perhaps even your wife to get started on in this hunting business. If you've already been taking your family fishing and spending time outdoors with them, the switch to hunting is normally routine and simple. Your best, most reliable outdoor buddy can be your wife, son or daughter! As the fall season continues there are a few rabbits and quail about, but the staple of local hunters, is deer. After the deer season ends, waterfowl beckon in late winter. Hunt turkey in the spring and, before you know it, it's time to start fishing again. Do be sure to check in with your wife once in awhile, if she's not one of your regular hunting buddies.

As with any outdoor activity, proper preparation is a must. You'll need a hunting license, tags and the like. Children will need to complete a hunter safety course and learn all the proper safety rules. It also never hurts for adults to brush up on state game laws and hunter safety as well. Any activity that involves firearms demands complete attention to safety by everyone involved. Something you may have done for years breeds a certain complacency of thought and action if you are not very careful.

# Basic gun safety rules are really quite simple and easy to remember:



#### **Rule 1: ALL GUNS ARE ALWAYS LOADED.**

"It's not loaded." is a refrain we've all heard and read about every time there is a gun "accident". **Be sure!** There are no accidents here – only negligent acts. "I didn't know it was loaded." is not an excuse.

# Rule 2: NEVER POINT YOUR GUN AT ANYTHING BUT YOUR TARGET.

If your gun is assembled and in your hands, it is capable of being fired. Never point a gun at anything but a clearly identified target.

# Rule 3: KEEP YOUR FINGER OFF THE TRIGGER UNTIL YOUR SIGHTS ARE ON THE TARGET.

**The Golden Rule!** If your finger is not on the trigger the gun cannot fire! (Unless defective, which is highly unlikely if it is properly maintained.)

Remember, **KEEP YOUR FINGER OFF THE TRIGGER**, until you have a clearly identified target! (See Rule 2)

### Rule 4: BE SURE OF YOUR TARGET.

Know your target, what is in line with it, and what is behind it. Never shoot at anything you have not positively identified. Do not assume anything.

Remember, firearms safety is something to be deeply ingrained in the hunter's psyche. It's something that starts between your ears, so think about what you are doing! Do not place blind faith in a mechanical safety device. Hunting is a safe activity enjoyed by millions every year. So take to the woods and enjoy the hunting experience. Savor the sights, sounds and smells of the woods as you pursue your quarry. The great outdoors is a fascinating place filled with a myriad of flora and fauna to become acquainted with on your excursions. For additional information on hunting opportunities at Thurmond Lake go to www.sas.usace.army.mil/lakes/thurmond or call the Thurmond Lake office at 1-800-533-3478.