Crab Orchard National Wildlife Refuge combines nature, recreation and more than a few secret spots.

The Unique Refuge

Story By Joe McFarland

Established in 1947, Crab Orchard NWR in southern Illinois has long been a favorite destination for a diverse range of outdoor recreationists.

It's become one of Illinois' greatest sources of new public recreation lands and wildlife habitat: During the past 20 years, decommissioned military property, such as the former Fort Sheridan north of Chicago or the Joliet Army Ammunition Plant to the south, are now protecting and serving our country on a new mission. Call it high-security habitat: Here, among the aged bunkers and training fields are thousands of acres of undeveloped habitat, much of it preserved under military security for 100 years or more. Public land managers are quick to recognize the potential for turning these former military sites into public destinations for sportsmen and nature lovers. And while some sites come with certain historical baggage (more about that later), in recent years, more than 33,000 acres of former military property have been re-commissioned as public wildlife areas in Illinois.

But the idea isn't new. The federal government has a long history of reclassifying military lands as public recreation and wildlife areas. Camp Logan, opened in 1892 along the Lake Michigan shoreline near Zion, now is part of Illinois Beach State Park. The Savannah Army Depot in northwest Illinois, opened in 1917, now is part of the Upper Mississippi River National Wildlife and Fish Refuge. In southern Illinois, a bomb and ammunition manufacturing facility that supplied U.S. operations during WW II is now Crab Orchard National Wildlife Refuge—the first national wildlife refuge to be designated in southern Illinois.

Among those former military sites-turned-public, the story of Crab Orchard remains one of Illinois' most complex and unique examples of public/private land use. For example, at this 43,990-acre national wildlife refuge, located south of Carterville, between Marion and Carbondale, the ammunition and bomb-making industry that began during WW II continues today. In fact, many of the original Department of Defense buildings still exist at this federal refuge. And, more often than not, they're still in use.

(Photos courtesy USFWS.)

It's all part of the original plan for Crab Orchard National Wildlife Refuge, which brings together a unique group of objectives among national wildlife refuges. According to the original man-

(Photo courtesy Cindy Taylor.)

(Photos courtesy David Brewer.)

Wildlife-watchers can catch a glimpse of everything from bobcats to barred owls within the more than 43,000 acres of Crab Orchard.

(Photo courtesy Linda Bundren.)

date that transferred this Department of Defense property to the Interior Department in 1947, the new wildlife refuge must include industry, agriculture, recreation and wildlife conservation. It was, in a sense, a mandate that kept intact what the Department of Defense was handing over. Prior to the war, sportsmen already utilized the area for fishing and hunting. Farmers tilled portions of the land. And businesses operated there also.

"We like to say we're a unique refuge," agreed refuge manager Doug Brewer, a biologist who oversees the unusually diverse activities incorporated within the 64-year-old refuge. Whereas the typical wildlife refuge in America might include closed areas where there is no public access and where wildlife have exclusive, free range, Crab Orchard includes closed areas where industry is given priority. Plus, some closed areas at Crab Orchard feature 1940s-era, igloo-type concrete bunkers where bombs and other ammunition were stored during WW II (one such structure was discovered to still contain live rounds several years ago).

Despite the unusual features, Brewer said the refuge has worked in recent years to maximize its benefits to wildlife, and that's a priority he wants to maintain.

"If there's a specific goal I have here, it's to improve and manage wildlife habitat for future generations," he said, adding that those future generations already represent a major part of the long-term mission. An increasing number of nature-related workshops and programs are being offered at the refuge as alternatives to the electronic distractions that would seem to be in direct competition for the attention of children and young adults today.

"If we don't reach out to educate the next generation about nature, they won't grow up to value the resource," Brewer said.

Not that there's any shortage of resources to appreciate here.

"There is an incredible range of habitat within the different geologic features at the refuge," Brewer noted. He said the ancient glaciers that left behind the familiar, smooth, rolling landscape in much of Illinois barely made it to the northern edge of what is now Crab Orchard Lake. Rugged, sandstone cliffs and deep ravines—the Shawnee Hills—can be found on the southern portion of the refuge where the glaciers stopped.

"It's another world when you get to the south end of the refuge," he said.

Indeed. That different terrain provides a very different landscape among the three major lakes here. The fact is, Crab Orchard Lake is just one of the lakes on this refuge. Within the 43,890 acres are three major impoundments, including the 7,000-acre Crab Orchard Lake, with its wide expanse of relatively shallow water and plenty of room for sailboats and water recreation. There's picturesque Little Grassy Lake at 1,000 acres (home to DNR's Little Grassy Fish Hatchery, along with a campground, concession area and a handful of private camps). And then there's the sparkling-clear and deep, 810-acre Devil's Kitchen Lake, whose cool waters host year-around populations of stocked rainbow trout. Each fishery is unique, due to different watersheds and lake fertility, and, each lake provides a new fishing experience.

Plus, there are numerous small ponds and medium-size lakes dotted throughout the public areas. All are

(Photo courtesy Curt Carter.)

(Photo courtesy Joe McFarland.)

At Little Grassy Lake, one of three major impoundments on Crab Orchard NWR, the waters offer up first-time adventures and trophy bass.

(Photo courtesy Jay Zimmerman.)

Concrete "igloos" once used to store explosives still exist within the refuge. A few have been refitted with special doors and converted into bat houses.

open to bank fishing only (waders allowed at some sites), and some of the ponds are closed during the winter months as migratory waterfowl rest areas. At a small lake known as A-41 (a vestigial name from earlier days), whopper bluegill exceeding 9 inches make the long hike to the shore worthwhile. Behind the refuge visitor's center, a 20-acre lake recently has been refurbished and stocked with channel catfish, largemouth bass, bluegill and redear sunfish.

Since 1998, the Department of Natural Resources has managed the fisheries on this federal refuge. According to DNR fisheries biologist Chris Bickers, who oversees the fisheries management, refuge anglers still can expect to find what Crab Orchard has long been famous for: excellent largemouth bass fishing at all three of the major lakes. All have produced bass weighing 10 pounds or more.

Bickers said, when it comes to bass, the prospects at the main lake—Crab Orchard Lake—are better today than they've been in years.

"During our fall 2010 electrofishing surveys, one out of every four bass we sampled was over the 16-inch minimum size limit," he said. Such promising odds for anglers are the result of many factors, including the regular stocking efforts at Crab Orchard Lake ("In 2010 we stocked more than 40,000 bass at Crab Orchard," Bickers added). But fish also appear to be utilizing the 50 spawning structures that were installed several years ago to assist the natural recruitment of bass.

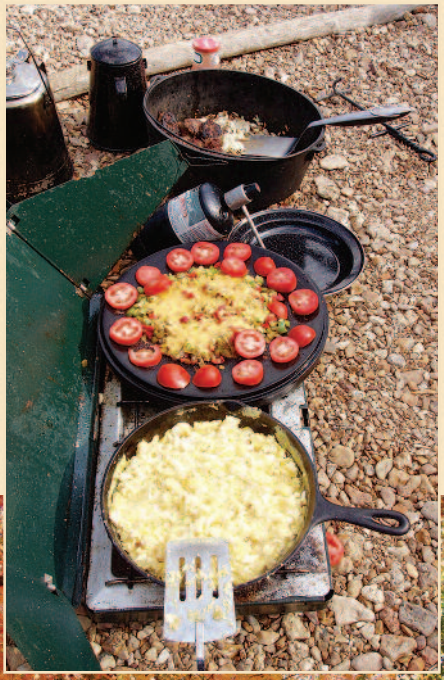
Bickers noted that, although Crab Orchard Lake is packed with forage for bass, the ability of the lake to produce a self-sustaining population of bass is hindered by years of shoreline erosion. Much of the shoreline is either eroded clay or soft muck—neither of which is favored by bass for spawning areas. To tackle this issue, the artificial structures, along with a "spawning refuge" (an area of the lake which has suitable spawning habitat and is closed between April 1-June 30), help add new bass to the lake.

In comparison, Devil's Kitchen Lake has adequate spawning habitat but a poor forage base for young bass, resulting in stunted growth rates for the first few years. Since hungry bass turn to eating panfish, the surviving bluegill and crappie in Devil's Kitchen can be huge. Those bass that manage to grow large enough to eat the stocked rainbow trout, for example, can grow to legendary sizes.

"We've sampled bass from Devil's Kitchen that were well over 9 pounds," Bickers said.

Little Grassy Lake might well represent the best of both worlds: With a self-sustaining bass population and good forage, this lake features excellent fishing for largemouths, crappie, bluegill and channel catfish. The source of many of those catfish is DNR's own Little Grassy Fish Hatchery, located northwest of the spillway.

"Each year we stock about 5,000 channel catfish to Little Grassy,"



Little Grassy Lake features a Class A campground with campfire-ready, lakeview sites.

(Photos courtesy Curt Carter.)

(Photo courtesy Teresa McIntosh.)

Dramatically different geologic features occur within the refuge, including the sandstone cliffs surrounding Devil's Kitchen and Little Grassy lakes.

explained hatchery manager Alan Brandenburg, whose production facility is open to the public during regular business hours throughout the year (open Sundays as well). As one of two state hatcheries, Little Grassy supplies sport fish to public lakes from the Ohio River to all points north.

Although fishing has long been a major attraction at this refuge, wildlife also are a huge part of the show. For decades the Canada goose was the symbol of local tourism—and no other site attracted more migrating geese locally than Crab Orchard refuge. Hundreds of thousands of Canada geese would arrive at Crab Orchard each winter, packing refuge fields and lakes and attracting crowds of hunters. Local hunting clubs catered to customers from everywhere.

"Southern Illinois was the goose-hunting capital of the world," recalled retired DNR biologist Dennis Thornburg, who said Canada geese began to shift their migration patterns during the 90s.

Today, tens of thousands of Canada geese still arrive at Crab Orchard during peak winter migration. And hunting opportunities continue to be offered in the Controlled Goose Hunting Area at Crab Orchard, with daily blind drawings held during the regular waterfowl season. But hunters target Crab Orchard these days for everything from ducks to excellent wild turkey hunting opportunities to white-tailed deer hunts (both archery and firearm). Upland game hunters have access to more than 10,000 acres for rabbit, squirrel and the occasional quail. Dog training is permitted in designated areas (special-use permit required). For a complete list of hunting regulations at Crab Orchard, visit: www.fws.gov/midwest/crab orchard/hunting.html#general.

For campers, the refuge offers four different campgrounds: Crab Orchard Campground, located on the north side of Crab Orchard Lake with access from Illinois Route 13, features dozens of Class A sites as well as options for tent camping. A bait shop is open from spring until fall at the campground. A limited number of camping sites also are available at the Blue Heron Campground, also on Crab Orchard Lake's north shore. For a primitive camping experience, eight tent sites are available on rugged Devil's Kitchen Lake (note that the full-service campground and concession no longer exists at that site).

Over at Little Grassy Lake, a popular campground and marina features more than 100 camping sites ranging from full hook-up to primitive camping with hot showers. The marina offers boat rentals, including fishing boats, kayaks, canoes and even pontoon boats—plus a swimming beach. A bait shop and concession features food, camping supplies, ice and drinks. The site is open from March 1 until mid November (through the close of the first firearm deer season).

Operated by the Land for Learning Institute, a nonprofit group whose mission strives to connect people with outdoor education experiences, Little Grassy Campground and Marina also features regular environmental programs throughout the warmer months, beginning in March.

"In 2011 we'll be featuring weekly programs that are free and open to the public," explained Land for Learning Institute Director Curt Carter, who operates the facility. "There will be introductions to canoeing and kayaking, music, storytelling and more." Carter added that campground reservations are available through his Web site (littlegrassylakecampground.com) or by calling (618) 457-6655.

For visitors planning to go anywhere on the refuge, know that certain areas are closed, including the eastern portion of Crab Orchard Lake. Additionally, an admission fee is required for all visitors. Yet, for opportunities that simply aren't available anywhere else in Illinois: a good chance to catch an incredible bass or monster bluegill or astonishing crappie—or fish in the only inland public lake in Illinois that supports year-around populations of rainbow trout—Crab Orchard National Wildlife Refuge is worth the price of admission.

At a glance

Crab Orchard National Wildlife Refuge, 8588 Ill. Route 148, Marion, IL 62959
Telephone: (618) 997-3344
Web site: www.fws.gov/midwest/craborchard
Directions: Located between Marion and Carterville in southern Illinois, this 43,890-acre wildlife refuge and its numerous lakes and attractions are accessible from multiple directions. The visitor center is located 1.5 miles south of Illinois Route 13 on Ill. Route 148. Interstate 57 is located directly east of the refuge and is the major north/south access point.

Vast areas of the refuge afford uncrowded opportunities for visitors to experience and reconnect with nature and wildlife.

(Photo courtesy Linda Bundren.)