Mathwig's cannons include this 3/5 scale Napoleon era model. Its 5-ft. long barrel will shoot a cannonball up to 700 yards.

EVEN MINIATURE MODELS WITH 1 FT. LONG BARRELS FIRE JUST LIKE THE REAL THING

He Builds Cannons Of All Sizes, Types

"People enjoy watching me shoot them off because they really make noise," says Tom Mathwig, Fall Creek, Wis., whose hobby is building cannons - ranging from 3/5 to 1/6 scale - that are authentic in every detail.

Mathwig's cannons are patterned after 18th and 19th century artillery models and include a 3/5 scale Napoleon era cannon, a 1/2 scale 1849 Civil War cannon, and a miniature 1/6 scale cannon. The Napoleon era cannon has a 5-ft. long barrel that'll shoot a 2-lb. cannonball up to 700 yards. The miniature 1/6 scale cannon has a 1-ft. long barrel that'll shoot small cannon balls right through a 50-gal. steel barrel from 45 yards away.

"I've been interested in cannons ever since I was a kid, but I didn't start building them until 20 years ago after my mother gave me an illustrated book on cannons as a Christmas gift," says Mathwig. "I picked out the kind of cannon I wanted to build and took measurements off the sketches. I make everything from scratch including the wooden wheels and carriage.

"The Napoleon era cannon was originally designed to shoot a 12-lb. cannonball. However, I use a tin can filled with 2 lbs. of concrete and can hit within 3 ft. of the target consistently.

"The barrel has a 53-in. long, 2 7/8-in. dia. bore and weighs about 350 lbs. It really has power. I've shot off 6-in. dia. trees from 200 yards away. Under the right conditions, neighbors can hear it 3 miles away."

Mathwig welded seven pieces of pipe of different diameters together to form the bore so that it would be strong enough to keep from blowing up even if it was accidentally overloaded with powder. He used oak wood for the carriage, 3-ft. high wheels, and spokes. Each wheel rim was formed by boiling two strips of wood and fitting them into a jig, then drying them. A steel band was then drawn around the rim. He used thread protectors from well casings to make the wheel hubs and mounted the spokes inside pockets. The axle was made from a steel shaft covered with wood. An elevating screw is mounted under the back end of the breech and is used to raise or lower the barrel when aiming it.

Mathwig built his 1/2 scale 1849 U.S. land artillery cannon from blueprints obtained from the National Archives. "It was one of the most popular cannons used during the Civil War," says Mathwig. "It had a bronze barrel that weighed 880 lbs. and had a 3.67 in. dia. bore designed to shoot 6-lb. cannon balls. During battle conditions, they used 1 1/2 lbs. of powder to fire each cannon ball to provide maximum smashing effect.

"A well-trained crew of six men could get off as many as five or six rounds per minute. A long-handled powder ladel was used to deposit powder in the breech. One man loaded the powder, another packed it with a ramrod, another loaded the cannon ball, another aimed the cannon, one commanded the crew and the last man fired the cannon by touching a paper wick soaked in salt peter with a torch. It would fire instantly. The torch was long enough that he would be clear of the recoiling cannon, but close enough that it was awfully hard on the ears. Between shots they swabbed the barrel out with water to extinguish any sparks."

"I use 4 oz. of powder each time I fire the big cannons so I can get only 4 shots out of a pound of powder. Powder is getting more expensive. A few years ago it sold for $1 per lb., but now it sells for about $12 per lb."

To make ammunition for the small cannon he wraps powder in aluminum foil and pinches it shut, then uses a small wooden ramrod to lightly tamp the powder into the breech. He inserts a length of wire through the touch hole and punches a hole into the foil and inserts a fuse. He then rams the powder tight, puts in the cannon ball, and lights the fuse.

"I use a commercial .69 calibre mold to make the small cannonballs. I use 'white metal' instead of lead because it doesn't leave a buildup of lead in the bore," says Mathwig. "People are surprised how loud the noise is when it's fired. I use about the same amount of powder that's in a 12-ga. shotgun shell, but the short barrel causes it to make a terrific bang. It also has a big recoil."

Contact: FARM SHOW Followup, Tom Mathwig, 9119 Mathwig Road, Fall Creek, Wis. 54742 (ph 715 877-2957).

SET UP YOUR OWN COURSE ANYWHERE

"Goofy Golf": Great New On-Farm Game

By Nancy Lowe Lonsinger

After dreaming about it for 40 years, Don Wachtel finally created a golf course on his hilly farm near Fresno, Ohio, after he retired. But it's not just any golf course - it's a "goofy golf" course.

Farms are perfect for Goofy Golf, says Wachtel, because you can set up a course almost anywhere. You don't have to worry about taking divots or landing in the rough because the rough is everywhere.

The balls used are old softballs that are rejects from a pitching machine and the only golf club you need is a putter.

Wachtel set up 18 Goofy Golf holes ranging in length from 125 ft. to 400 ft. long. He keeps the pastures mowed but they're not "fairway" smooth because, essentially, they're still cow pasture. The "greens" consist of circles of sand ranging in size from 15 to 25 ft. in dia. with a "cup" (made out of PVC pipe) that's just a little bigger than the softballs. Wachtel uses sand for the greens because it catches the ball when it lands and yet the ball will still roll over the top of it for putting.

"I got the idea for Goofy Golf in the 1940's when I got out of the service and my father took me to play it. I've never seen the idea again but I never forgot it. When I retired, I decided to set up my own course," says Wachtel.

The first tee is on the side of the hill behind the Wachtel home. It follows the contour of the hill, goes down the slope, crosses a brook, a township road, and returns straight up over a hill that's so steep the ball often rolls back down to the bottom after you hit it. People who play goofy golf on his farm have to have a sense of humor, says Wachtel, because you often end up swinging on slopes so steep it's hard to keep your footing.

Designing the course was almost as much fun for the Wachtels as playing. The most difficult part was convincing the truck driver who brought the sand that they really did want it dumped in small piles around their fields to make greens. Signs around the

"Goofy Golfers" use old softballs instead of golf balls and the only golf club used is a putter.

course give golfers humorous warnings or instructions. The course is too rough for a golf cart so everybody walks. The balls are large enough so they can be easily seen even in tall weeds. Golfers can't hit "Goofy" golf balls as far (the record is about 420 ft.) but because the course is much shorter, par is similar to a regulation course.

"It's a great way to have fun with friends, get some great exercise, and enjoy the outdoors. And it's inexpensive to set up the course. They say a conventional golf course costs at least a half million dollars per hole to construct. We spent just $100 to 125 per hole on our Goofy Golf course," says Wachtel, who's printed up cards for keeping score on the 18-hole golf course. He plans to open the course up to the public in the future but, for now, he only opens it to groups which pay an entry fee.

For more information, contact: FARM SHOW Followup, Don Wachtel, 50122 TR 189, Fresno, Ohio 43824 (ph 614 622-0099).