Barn architecture reflects ethnicity of builders, function of structure
from the Star Beacon, Ashtabula, Ohio, Dec. 27, 1999 (Ashtabula is 50 miles east of Cleveland)

(While this article is a bit of departure from the usual gardening stuff, barns are an integral part of agriculture history and, since one of the Master Gardeners family is the focus of part of this article, I thought I would include it. The Ohio Cooperative Extension is also involved with the Barn Again! project. Besides, I think it's interesting; I hope you do, too. Ed.)

There was a time when every American youngster grew up spending much of his free time among the dusty, earthy smells of a dark barn’s interior. From chasing cats in the hay mow to sneaking a first cigarette or kiss behind the barn, these structures were part of everyday life in rural America.

Today, the majority of teen-agers are more familiar with the crooks and crannies of the mall than they are of a barn, corn crib or silo. Despite their fall from workaday American culture, many of these semi-antiquated anachronisms of American’s rural culture remain. You don’t have to travel far to find a barn in Ashtabula, Lake or Geauga counties. Both century barns and modern structures dot the countryside. Occasionally, even the property of a villager whose backyard was once part of a farm will include a venerated barn.

Despite the ubiquitous nature of barns, particularly older barns built before World War II, most of us know little of their history or structure. While barns have not attained the honor bestowed upon covered bridges, they are nevertheless wor-

**Big Events Happening, check calendar on page 8 for all the news!**
nomic worth....In America, and especially in the Midwest, with its specialized, commercial agriculture, the barn’s image and function translated into extraordinary architectural forms, often appearing like veritable castles on the rural ‘landscape’.

ETHNIC INFLUENCES

While function plays an ever-increasing role in barn architecture, ethnic considerations also played into the style of the barn in the 18th century. Allen G. Noble and Richard K. Cleek, authors of the “The Old Barn Book” (Rutgers University Press, New Brunswick, N.J.) note that barns are primarily a European phenomenon. Cultures outside Europe had no need for barns, either because the climate made their protection unnecessary or there was no excess of crops to store.

With their strong connection to European farming culture, American immigrants tended to build barns that looked and functioned like those they used in Europe. The classic three-bay threshing barn is an English transplant found throughout our area.

The English almost always built their barns of stone but in North America timber was usually the primary choice of building material. These barns are timber framed, that is they are constructed on a frame of hand-hewn timbers using post and beam construction. The timbers were frequently cut from the woodlands surrounding the farm. Typically,
the barn builder would come to the farm, give the owner a list of the timber and dimensions he would need, then return once the logs had been cut. Prior to the Civil War, these timbers had to be hewn by hand or sawed using a pit saw—two men on a cross-cut saw, one of them in a pit, below the log, laboriously sawing the length of the log. English barns are distinguished by their vertical siding (which is seldom weather-tight) gabled ends, and a centered door that provides access to the middle bay.

Functionally, they were built for wheat farming. The central bay was initially used as a threshing floor with open doors on either end. The side bays would be used for threshed and unthreshed grain storage. The loft, called the mow, was used to store straw.

The English barn adapted to farming changes in the Midwest, although not always ideally. Livestock might be housed in one of the grain bays and the hay for those animals stored in the mow. With modifications to the doors, a wagon could be brought into the center bay and the hay either pitched into the mows or moved through an overhead hay track, added to these 19th-century barns in the early 1900s.

Northeast Ohio has many fine examples of English barns still standing and a good many examples topped on the ground, as well. As late as 1975, 25 percent of Geauga County’s barns were of this style, according to “Barns of the Midwest,” edited by Allen G. Noble and Hubert G.H. Wilhelm.

Modifications often mask this common barn style. Recent “improvements” might include replacing or repairing the wood siding with corrugated metal, plywood or even fiberglass. A common variant of the English barn is the gable-end shed. Often added at a later date to accommodate livestock or equipment, these sheds were attached to the gable end of the original barn. The barn and shed shared the same roof line, giving the impression of a saltbox roof.

Another evolution of the English barn is the three-end barn. A straw shed added at a right angle to the original English, or raised barn, produced this kind of structure. By the end of the 19th century, farmers were building them as a complete unit.

Most English three-bay barns have low foundations but farmers also built them with a raised foundation and banked entrance. Banking provided a lower story for livestock and was practical when the topography permitted this type of construction.

In New England, the English barns of the early settlers sometimes evolved into the connected barn, in which a series of buildings were constructed between the house and barn before all the structures were connected. The advantage to the farmer was that he could tend his livestock without having to face the elements. These barns usually had four major parts, as recalled in the nursery rhyme, “Big house, little house, back house, barn.”

One of the distinguishing features of the English barn is its lack of windows and limited ventilation openings. This provided an unhealthy atmosphere for cattle. Dedicated dairy barns will usually have a long row of windows along the foundation.

German barns, the other major class of ethnic barns found in the Midwest, are not as common in Ashtabula County as the English barns. An icon in the Pennsylvania Dutch country, many of these are large, banked barns with a forebay—an extension of the second floor beyond the foun-
dation wall on the barn’s downslope side. There are at least 10 types of German barns.

Other ethnic barns, not common in this area, include French, Hispanic, Dutch and Finnish barns.

George Washington owned a round barn.

Round barns were not built in large numbers until the 1880’s, when agricultural colleges and experiment stations taught progressive farming methods based on models of industrial efficiency. Advantages included a greater volume-to-surface ratio than the rectangular or square barn. They also saved on material costs. Round barns flourished in the Midwest until the 1920s.

Sears, Roebuck and Company and other mail order firms once sold barn kits.

Decorated brick-end barns were built in southeastern Pennsylvania and central Maryland. Builders created a decorated end by omitting a few bricks in a geometric pattern.

Barns dating from before the end of the 18th century are very rare. Those that remain are usually large, well-built and were part of wealthy properties.

Rural Trivia

Why are some barns red.....and some barns round?

During the 18th and 19th centuries, North American barns were usually not painted. Painting was considered showy, extravagant and vulgar. Perhaps most importantly, most farmers couldn’t afford the paint. Northern and mid-Atlantic farmers began painting their barns red in the early 19th century. There are many theories on why red but the most plausible is that blood from the slaughtered livestock or iron oxide mixed with milk provided an economical paint.

Pennsylvania Dutch barns often used hex signs for decorations. Contrary to popular belief, these signs were rarely used to ward off evil spirits.
Salad Burnet
*Sanguisorba minor* or *Poterium sanguisorba*

Are you looking for something a little out of the ordinary? Something to surprise and intrigue people? Well, there is this little known salad green that can fill the bill. Salad burnet is a lovely and hardy plant to grow. Its fernlike foliage is a plus in the garden and its taste is an unusual treat.

While the literature calls it a perennial, I’ve found that it operates like a biennial with a growth of leaves the first year and flowering the second. However if you cut the flowers back, it will continue to put out leaves. (The flowers attract great quantities of pollinating insects.)

Burnet is native to central and southern Europe and even into southern Norway, also native to Asia and it has naturalized in North America.

Its name comes from the Latin “sanguis sorbere,” (to absorb blood.) The traditional use was as a wound herb to staunch bleeding. As a medicine it was supposed to pucker up the tissues and draw the sides of the wound together to heal. Burnet was used to treat gout and rheumatism, and drank as a tea. It is a mild diuretic, astringent, promotes perspiration and aids digestion. There is no current scientific evidence that burnet is effective medicinally. The common name comes from its long-time use as a culinary herb. Nutritionally, the plant contains vitamin C and tannins.

Pliny, in first century A.D., discussed burnet’s medicinal uses. It was found in medieval gardens and used in salads. Pechy, an eighteenth century, herbalist, created a concoction that contained salad burnet, to protect people from the plague. Sir Francis Bacon recommended it as a plant that should be stepped on to release its scent, much in the same way you use mint and thyme. He suggested entire paths of it be planted. Many traditions crossed the Atlantic and the Shakers are known to have used it in the 1820’s for healing wounds. Thomas Jefferson recorded that he sent two boys out to pick six to eight bushels of the seeds. This amount of seed would cover approximately 16 acres. He used it for grazing livestock and erosion control.

The plant stays green all winter long and seems very hardy. When all you can find in the stores is iceberg lettuce, this nice green is handy to perk up even the most dreary winter salad. It has an interesting flavor, described as spicy, cucumbery and nutty. It can be used in soups, stews and seasonings and in wine or beer. (Use it as a garnish in Bloody Marys instead of celery.) Use the young, leaves as older leaves can be bitter. The flowers can also be used in salads and as a garnish. Dill, basil, thyme, garlic, oregano, marjoram and tarragon blend well with burnet. Don’t dry the plan—it only works well fresh.

Flowers appear in April and it continues to bloom for a couple of months. The flowers form an oval ball at the top. The topmost flowers are female, the middle flowers are hermaphrodites and male flowers grow at the bottom.

Salad burnet can be grown readily from seeds. I sow them directly at the same time I sow my early spring lettuces. In the first year they grow into gorgeous little mounds of feathery foliage. They would make a nice addition along a border in a flower garden. The second spring they send up flower spikes; you can cut them back or leave them to grow. I like the fact that they attract such a large quantity of insects. I’m sure it improves the pollination of many other plants. Like most perennials they can be divided in the spring. They will grow in sun or shade but prefer full sun and alkaline soils. Once the plants are established, they need little care.
Mites

Spider Mites are tiny little creatures that can cause a considerable amount of damage to a variety of plants. Mites are not insects. They are more closely related to spiders and ticks—arachnids.

The damage these little creatures can do can be extensive on a wide range of plants, both inside and outside. They can cause the death of large and established trees and shrubs, especially if the plant is already under some kind of stress. During a rainless summer several years ago, a number of very large Arizona cypress trees had massive infestations of spider mites. Between the extreme stress of drought and the mites, many of these trees succumbed.

Spider mites don't limit themselves to trees. You will find them on roses, perennials, annuals—marigolds are favorites—raspberries, beans and cucumbers among others.

Adults and nymphs suck juice from the cells of the plant. The damage they cause isn't always that noticeable at first. A lack of vigor and premature leaf drop may be the first signs. On close inspection some white flecking may appear. These are typical around feeding sites. A bronzing of the foliage may also start to show up as the infestation goes on. Webbing on the underside of the leaves is visible to the naked eye (for those of you with good eyesight, others of us may want to use some magnification.) If the infestation is a large one, the webbing may become more obvious. Another method to find out whether you have mites is to sharply tap the branches of the plant over a white piece of paper. If little red, green or yellow specks come off that move around, you have spider mites.

Mites start life as eggs, hatch into a six legged immature stage, then metamorphose into an eight legged immature stage and then into the adult. In the right conditions this may only take 10 days. Females can lay up to five eggs per day over two to three weeks.

The good news is that spider mites are easy to control with simple methods and no pesticides. Most pesticides won't work on mites and may actually make the problem worse, by killing mites' natural enemies. You must find a product that is specifically developed for mites (a miticide). There are not many of them out there, but all you really need are a hose and water. High humidity and a healthy plant reduce the mite's ability to spread. First make sure your plants are watered properly and then take that hose and spray those plants down. All that water increases the humidity and the mite's ability to feed. With really large trees this is difficult, but do the best you can to reach all parts of the plant. Do this every few days and periodically check for mites. The number you find should start to go down.

Spider Mites have natural predators as well. Several types of pirate bugs and other predatory insects feed on mites. Banked winged thrips can also limit mite populations. High humidity can create conditions where a fungal disease can kill mites. Dormant oil in the winter can kill overwintering eggs on fruit trees.

Other types of mites are very tiny and little studied. Eriophyid mites are not visible to the human eye but can cause some damage to the plant. They live on the surface of leaves. Leaves and/or fruit may turn a rusty brown. Others create galls. These may be small blisters to large swellings on leaves, branches, flowers and buds. While they can cause damage they can be easily controlled by natural predators and dormant oils.

Jeff Schalau reports that he has been seeing mites on aspen and pear trees in Prescott.
Trelli age
(or, the time before Home Depot)
from a Victorian Garden Catalog around the 1880's

TRELLIAGE (as is sufficiently obvious) is of French origin, and is, broadly speaking, an elaboration of the Trellis motif of which the illustrations herewith will give a far better notion than many words.

Trellage was in use as far back as the days of Pompeii, as some of the frescoes on the excavated walls had clear indications of Trellage in use as a garden decoration. In France the art of the Trellisateur has long flourished, and much beautiful work of this description can be seen in that country. In Holland, this form of decoration for gardens was much in vogue during the XVIIth and XVIIIth centuries, and in a curious Dutch gardening book, "Der Nederlandteen Hovenier," published in 1670, are many quaint illustrations of the Dutch Trellage of that day. Two examples from this book are illustrated herewith.

In England Trellage was in vogue from the XVI to the end of the XVIIIth Century. In 1761 Sir Horace Walpole visited a friend of his and drank tea in the arbour of treillage; which seems to have impressed him, as, some time after, he writes with reference to a Garden Bower he proposes to erect: "I have decided that the outside shall be of a treillage, which, however, I shall not commence till I have again seen some of Old Louis Old-Fashioned Galantries at Versailles."

Up to the last decade, very little attention was paid to Treillage in this country, except that from time to time travellers of taste and discrimination imported it into England but the expense has been almost prohibitive, as the material itself is very fragile and difficult to pack and, beyond this, it is advisable, although perhaps not absolutely necessary, that workmen who understand the work should accompany it for the erection and completion.

During the last few years, with the growing demand for this form of garden decoration, my resources for the designing and economical manufacture and erection of Treillage have enormously increased and I am now able to carry out this work in all its branches, whether for outdoor or indoor use, much more economically than any Continental firms under equal conditions.

Trellage, as we may gather from the accompanying illustrations, is by no means a stock article—sold in lengths—such as the expanding trellis one obtains from an ironmonger's shop, but must be specially designed and made in each case to fill with character and distinction the spaces to be treated.

It is, of course, impossible to issue a comprehensive catalogue and price list of this work, and the examples here shown are merely to illustrate what has been and may be done, and are, for the most part, of work which I have carried out in various parts of the country.

In nearly every case where a scheme of Treillage is under consideration, it is advisable that the site should be inspected, and a design prepared to fill the needs of the case, and for this purpose I am always willing to send representatives to all parts of the country, and to prepare special designs free of charge.

The different ways in which Treillage may be used to advantage are almost too numerous to mention, but a few of the various forms are as follows:

As a Covering to Blank Walls where creepers are inadvisable or impossible.

As a Screen in the Garden to divide one part from another.

For Garden Temples, Pergolas, Arches, Rosaries, Arbours, etc.

For the interior Decoration of Conservatories, Winter Gardens, Loggias, Verandahs, Balconies, etc., and a variety of other purposes.
July Calendar

Check peaches; peach tree borers may be boring into your fruit. Look for a spot of clear resin; these indicate entrance and exit holes. Check the tips of the twigs, also, for borer damage.

Watch your corn for earworm damage. Spray the silks with vegetable or mineral oil just when the silks start to turn brown.

Plant beets, broccoli, cabbage, carrots, cauliflower, green onions, leaf lettuce, peas, spinach and turnips for a fall harvest. Eggplant, okra, cantaloupe, peppers, pumpkins, tomatoes, watermelons and winter squash can also be planted. Potatoes can also go in but wait until the end of the month.

Remove faded flowers from roses and other summer annuals to keep the blooms coming.

Roses need a bit of fertilizer to keep the plant blooming.

Solarize any areas where you have had problems with soil borne diseases or insects.

Cut back old raspberry canes after fruit is harvested. Cut off blackberry canes that have borne fruit and tie new canes to the trellis. Wait to do this until August if you live in a really cold part of the county.

Big News!!!!

Yavapai County Master Gardener Picnic

July 22 in Prescott, see flyer enclosed. Come have a great time, meet some fellow gardeners and have an opportunity to visit Willow Creek Nursery in Chino Valley. Willow Creek Nursery is a large commercial nursery that supplies a lot of the bedding plants and vegetables at our local stores. If you have never seen a commercial nursery this is a great opportunity to see how the pros do it. It’s rather mind boggling!

Yavapai Rose Society meeting, July 17, 7pm at the First Christian Church, 1230 Willow Creek Road, Prescott. Jim Cording from Vision Scapes will talk about Landscaping with Roses. There will be a consulting Rosarian Question and Answer period. For more information call Bob or Nancy at (520)771-9300.

Big, Bigger News!!!!!

Yavapai/Gila County Gardening Conference, September 7-8, Tonto Natural Bridge State Park. I’ve extolled the virtues of going to gardening conferences in the past and now we have one for our region, just a short drive from most of the county. Here’s a great opportunity! There will be sessions on composting, vermiculture, xeriscape, design, water harvesting and lots of other topics. There will also be vendor exhibits and sales. All the bugs haven’t been worked out yet, so keep your eye on the newsletter for more details. There will also be a website up soon.
Prescott Farmers Market is open for the fourth market season. The market will open on June 3, 2000, and through October 7, 2000. There will be no market on July 1, 2000, and, since this is open-air, weather is always a factor.

Prescott Farmers Market is open to vendors who have grown or produced their wares. In previous seasons, a variety of fresh produce has been available to consumers, including tomatoes, Swiss chard, peppers, peaches, Japanese eggplant, soybeans, gourds, herbs, and potatoes. Growers arrive from Prescott, Chino Valley, Verde Valley and the Phoenix area to sell their produce direct to customers. In addition to the produce, honey, soaps, salsa, plants, fresh cut flowers and baked goods have been available.

Master Gardener Website

You can find this newsletter along with the Master Gardener Manual, the Farm Fresh brochure plus other information at the Yavapai County Cooperative Extension Website. Go to:

http://ag.arizona.edu/yavapai>http://ag.arizona.edu/yavapai/

The "Arizona Master Gardener Manual" is now on-line. Check out
http://ag.arizona.edu/pubs/garden/mg/

NOTE FROM THE EDITOR:
Let me know about your garden, the types of seeds you planted, interesting articles you found—anything of gardening interest. Send to:
Nora Graf
P.O. Box 3652
Camp Verde, AZ 86322

Jeff Schalau
County Director,
Yavapai County Extension Agent,
Agriculture & Natural Resources

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Yavapai County Master Gardeners

Upcoming Events—Summer 2000

2nd Annual Picnic/Potluck

Come and visit with other Yavapai County Master Gardeners at the Annual Picnic/Potluck. The picnic will be on Saturday July 22, 2000 from 11:00 AM to 3:00 PM at Flynn Park in Prescott. Cooperative Extension will provide hamburgers, buns, beans, and soft drinks. Sorry, no alcoholic beverages please.

If your last name begins with A-M bring your favorite salad, N-Z bring your favorite dessert. We will have lunch at 12:00 noon, followed by entertainment and a short business meeting and update on upcoming activities. Bring a guest and join the fun!

Please RSVP to the Prescott Extension Office (520) 445-6590 or by E-mail <jschalau@ag.arizona.edu>. If you would like to come at 10:00 AM and help prepare, please let us know.

Directions: from the Courthouse Square in downtown Prescott, continue west on Gurley Street for 1.3 miles. After passing Gail Gardener Way (a signaled intersection), turn right on Josephine Street. Flynn Park is less than 1/4 mile north of Gurley on the right.

See you there!

Field Trip To Willow Creek Greenhouse

Heidi Williams, Sales Coordinator, will lead us on a tour of this state-of-the-art greenhouse facility at 9:30 AM on Friday July 28, 2000. Willow Creek grows annual flowers and other materials in their 10 acre newest Chino Valley location. The environmental control and automation is awesome.

Space is limited to 30 Master Gardeners for this tour, so you must call and reserve a spot. Please RSVP to the Prescott Extension Office (520) 445-6590 or by E-mail <jschalau@ag.arizona.edu>.

1st Annual Arizona Highlands Gardening Conference

The 1st Annual Arizona Highlands Garden Conference will be held at Tonto Natural Bridge State Park near Payson, Arizona on September 7 and 8, 2000. The conference is being organized by the Arizona Highlands Master Gardeners: a newly formed group of Master Gardener volunteers from Gila and Yavapai Counties. The Arizona Highlands Garden Conference will focus on gardening practices for the mid and high-elevation areas of North-Central Arizona. It is open to the general public from professional to hobbyist.

Topics to be covered will be: Composting, Vermiculture, Xeriscape, Native Plant Selection, Landscape Design, Integrated Pest Management, Plant Pathology, Water Harvesting, Irrigation, Plant Propagation, Vegetable Varieties, Growing and Using Herbs, and much more.

Tonto Natural Bridge State Park has an historic lodge, where the indoor session will be held, and an adjacent garden/lawn area, where the outdoor sessions will be held. Guided hikes to the bridge and creek will also be available.

Yavapai County Master Gardeners Beverly Emerson and Carole Mackler have been working closely with Gila County Master Gardeners and ANR Agent Chris Jones.

The cost of the conference is $50 (I think). More information will be forthcoming or call the Gila County Cooperative Extension Office in Globe (520) 425-7179 for more information.

A block of rooms has been reserved at the Inn of Payson, 801 N Beeline Hwy, Payson, AZ 85541-3709, Phone: (520) 474-3241.

Western Region Master Gardener Conference Coming to Phoenix October 14, 15, and 16—Watch future newsletter for more

The Conference invites homeowners, horticultural professionals, educators, and Master Gardener Volunteers from the entire 11-state Western Region. Featuring tracks to teach the latest information: Homeowner/Beginning gardener, Advanced Gardener, Specialty, School/Youth Gardening, Master Gardener, Home Garden Tree Care Topics, AARS-sanctioned rose workshops and seminars, special Extension Agent’s track and much more! Conference web site at ag.arizona.edu/maricopa/garden/html/calendar/mg2000.htm