Outdoor Production Systems

PANEL:
David Odland, Clarion
Wendell Williams, Milford
Gary Johnson, Geneseo, Illinois
Paul Brown, New Providence
Wayne Rousch, ISU Western Research Farm, Castana

WAYNE: I work at Iowa State’s Western Research Farm over by Castana, in west central Iowa. We pasture farrow in the fall, right after Labor Day. We farrow first-litter gilts every year, and we get rid of the gilts after they’ve farrowed—we don’t farrow anything more than once. We buy replacement boars every year and save our own gilts. We generally wean at about four weeks. This year, if you heard about some pigs being segregated early weaned and then put into a hoop structure, that was us. We don’t usually finish too many of our own pigs.

GARY: I live just across the river from Davenport, Iowa, in Henry County, where we have a lot of pasture production. I manage farms that are leased on a livestock share basis and market around 45,000 hogs a year. Not all are pasture farrowed, but they’re predominantly confinement finished. And we’re using a lot of the Scandinavian genetics. Lauren Christian got me started on this a few years ago, and we’ll have other comments here on genetics. I see we’ve got some commonality here just in this group: we’re all trying to get a lean, durable hog. We really don’t want a 40% cull rate or whatever some of the stuff I read says; we’d like a little lower cull rate and we feel we can get the same economical product using purebreds vs. company boars—not to get on my soapbox—but at a lower cost.

WENDELL: We’ve been pasture farrowing since about 1983. My quote was the one that Dr. Honeyman showed in his presentation this morning (see p. 46): my barn burned down and it was a good deal. That wasn’t so much my impression the night it burned, but within a matter of months I figured out it was a pretty good deal. We farrow for six weeks starting about the 20th of April, and we farrow two three-week periods in there. We farrow the gilts and kill them in the middle of summer, and we finish the pigs. Some are on concrete, open slat floors, but a significant portion of them are finished right out on the dirt lots.

PAUL: My wife and I started farming in 1991 on our own and we started pasture farrowing because I’d worked for my father-in-law back in 1987 and was exposed to it then, and found it was a very cheap way for us to get started and generate a lot of income with very little cost. The two biggest things to me are low-cost production—I appreciate that about it—and also I like that the environment’s a lot
more healthy. We also farrow inside our farrowing house two times during the winter, and that’s a lot dustier: we have to wear dust masks. My son never comes out there, but he’ll be out in the pasture with me all summer long if he can. We farrow the largest portion of our pigs in June and July as gilts. We also farrow old second and third litter sows in April and September.

DAVE: We farrow two bunches of gilts: 150 in late May/June farrowing and another bunch of 100 in July. And we finish all those batches out ourselves. Our system has evolved over the last—I would almost say 100 years, when I get to thinking about it. It’s been a system that my dad and my grandfather and my great-grandfather used. We do modify things as we go, but it’s a system that makes us money and it’s very healthy. I’ve got a story when you talk about it being something that the kids want to come out and help with: it’s true. A former high school classmate who is 41 years old put up a confinement building in 1975 and his doctor told him he had to get out of the hog business because he had the lungs of a 65-year-old. He’s the same age as I am, we’ve been working with about the same number of hogs for the last 20 years, and now he’s sitting there with nowhere to go. I know there are precautions that you can take [to guard health while working in confinement buildings], but health is a very positive [aspect of outdoor systems]. It’s fun to go out there. We talk about the rain and the bad weather and all the other bad things, but there are a lot of days when there’s nothing more fun than going out and looking at 10-12 litters of new pigs. When they’re a week old, they’re running around in the grass. It’s quite a sight. It’s an exhilarating lift. (I learned all those big words when I was down at Iowa State!) That was back in the mid-70’s. I graduated from Iowa State in animal science; in fact, one of my animal science professors has gone on to bigger and better things. I see he’s in here as the Dean of Agriculture now. He’s done well too! (laughter: ISU Dean of Agriculture David Topel attended this session.)

GARY: In our system in Henry County, we pretty much farrow by the calendar. Here’s an overview (overhead transparency). We start breeding December 10 and then start farrowing April 1, and that doesn’t vary—six weeks in the spring, six weeks in the fall. If you want to see me afterward I have copies of this information. We talk about getting psyched up: one advantage of this that makes it so popular is that you can gear yourself up to farrow for six weeks, you can gear up your management skills, and in six weeks—boom—your farrowing’s done, and you go to the next phase of production. And that’s one of the reasons that calendar system has been fairly popular: it has a strict starting time and a strict finishing time for each phase. We always do an inventory and we usually have 100 pigs left. I don’t know why we keep them around, but I tell you, it’s really easy to keep records because we’ve got an all-in/all-out system. Two batches a year and you can carry a lot of pig champ records in your head right on that calendar. You know what your average time to market is, what your feed conversion is (with simple calculations), your pigs per sow per year, and all of that. And it doesn’t take a computer to do it. (See Gary’s Pasture Farrowing Calendar for Northern Climates at the end of this section.) If any of you have questions, feel free to ask.
(to Dave) I’m about 30 miles straight east, on similar soils. Do you have to have sandy soils to use this?
I would say it would be more the Clarion. On any land that’s got some Clarion, stick to the highest well tiled spot. We’ve done that a long time and even then in ’91 and ’93 we had to struggle with it. The logistics of getting out to the pasture are that you’ve got to have some determination some mornings. The worst morning ever was in ’84. I remember because one of my best friends got married in June. I remember his wedding night because it rained and rained and rained, 10-12 inches, and we couldn’t get to the farm. It was at my dad’s farm—the only time that’s ever happened—that there was death loss. That’s the opposite of exhilaration.

Do all of you ring your sows? And how often do you rotate your farrowing pasture? One of you indicated that you feed your butcher hogs out on dirt lots.
No, we ring the sows, and our pigs have been on the same area basically for 14 years. We have some quackgrass seeded down out there. They can’t kill it, they tear it all up, but it comes back stronger the next year. We do not ring the fat hogs. Parasite control can be a little problem. We’ve been experimenting with a perpetual, and we went through the Ivermectin program. We cleaned the whole herd up and now we feed Safeguard perpetually at about a .15 rate. It’s really not cleared in Iowa to do that, but it certainly prevents a lot of parasite problems in my system. But you’ve got to ring the sows. I can’t imagine trying to farrow without it.

What type of fence are they in—electrical fence?
(same respondent) I use woven wire and hog panels. I was interested in the discussion about electric fencing in the earlier session. I’m going to try it.

We use woven wire and rotate every three years on the pasture and ring sows. It’s a must. We’ve had woven wire and it’s a routine we’ve gotten into using and we’ve got our system set up: four different pastures on an 80-acre field, and we just rotate around.

How can you expand the operation?
I could put another 100 huts out. It’s probably easier to expand in this system than any other. How hard do you want to work?

Do you move your A-frames after each farrowing?
I put mine in. They farrow in late May, early June. We’ll get that bunch out. Farrowing takes three weeks. They’re there for four weeks. We wean them after four weeks. We move the A-houses, rebed them, and then run another bunch in the same way.
Have you ever used any solar fencing?
With solar fencing, the charge isn’t strong enough. You can try it. I use the strongest caliber fencer we can buy. One that will stop anything. If you haven’t used electric fence before, remember how dumb these gilts are the first time that they’ve come off the feed floor or out of a confinement building. You have to train them. So we take a set of hog panels and make a corral so they can go out into it and around the inside by the hot fence. It doesn’t take very long, just a few days, and once they’re trained they get along fine. But if you think you can take them out and dump them, they’ll be back up at the barn, probably before daylight. It’s important that you do that training. Otherwise they’ll stick their noses underneath that thing and get the shock and just take off and tear your whole fence down.

What’s the gestation system?
We are using Cargill floors. Mark had a picture this morning, but there’s a thinner feed alley, it’s kind of like a dairy stanchion. The sows go up head to head, and you walk down between them with a 5-gallon bucket and feed them. We like that real well. There are other ways you can do it, but that way you can rotate your boars easily in groups of 25-30. If you have an old Cargill floor, you can either pour a sidewalk down the middle, or go to Iowa Concrete Products and buy these precast concrete fenceline feeders. There are a lot of ways to do it. This has let us rotate boars where before we couldn’t when we were trying to breed, say, a group of 150 and turned out 15-20 boars with them and didn’t know which ones were worked and which ones weren’t. And it’s helped the conception rate.

You who are farrowing in early May or April and September [it seems] have a small window there before the weather gets bad. Are you breeding your sows or your gilts back right away? Are you having luck getting them pregnant the first time around?
That’s been a bit of a problem as we’ve gone to these large white Landrace crosses that grow large litters. As you all know, they get sucked down and they won’t cycle. So we’re looking at carrying those one cycle—otherwise they get so strung out coming into the fall. I think that’s something we’ve got to learn to manage better. We’re feeding fat in these rations, trying to keep their intake up, but we’re weaning at 28-35 days and they’re heavy milkers.

You’re self-feeding them then?
Yes.

What are you using for your sows?
A. Large white Landrace cross, an F-1 cross. As far as pig production, everything is excellent because of their maternal lines, plus they’re bred to milk and they do just that. We’re looking at different methods of early weaning, but as you all
know if you’ve got a pen of 200 pigs, it’s tough to wean those at 18 days. They’re just not very competitive. I don’t know what it would take. Maybe somebody’s got some experience on early weaning out in the field. But it’s tough to do and to keep them uniform and not end up with a whole bunch of runts. Is there anyone here who’s had any luck with high energy rations, a high-oil com, or any information on lactation rations that work well? The sow’s converting her feed to milk, it seems, at a faster rate than she can keep up with.

(Another speaker) That’s what we’re doing this fall. This summer we’ll have a 60-acre field planted with all that high energy DuPont (whatever they call it) Top Cross pollinator. We’re doing it because we’ve had a lot of problems with that same thing: trying to keep the sows conditioned. We’ll give that a shot and see how it works.

What about huts? What kind are you using? What do you find works the best?
I’ve brought some slides on these modified A’s because I don’t see many of these in Iowa with the bedding system we’re using. This will show you the plywood sheds we’re using. This is an example of taking a large round bale, and this is what we call a bale processor. It picks the bale up on the back like on a fork lift, tips it up like a big propeller, then there’s an auger that just augers it out in a pile. You make a big enough pile that it will fill the shed. There’s a pile of corn stalks there. These are the type of sheds we use in Henry County. They’re 5x7 feet. When you’ve got the gilt that you can’t keep in the shed, you use a hog panel there in a half-circle that’s just stapled to the side for the first few days so she’ll stay in there and won’t try to go into another shed. It’s a little problem to get gilts to go into the shed for the first time. Once they’re sows they’ll do it fine, but gilts are leery of that bedding—it scares them. You almost have to physically shove them in there. Put her in a hog cart, back the hog cart right up to the door, and push her in there head first. Then lock the door.

These are gilts that have come off confinement?
Yes. That bale processor is just an example. In our area there are people who come around to do it on a custom basis, and they’ve been charging 50 cents a bale. One bale will do about eight sheds, and the processor will grind up the twine and everything.

You have to store that bale then all year? Do you have to store it inside?
No, store it outside. We’ve been doing this now at the end of February, bedding these sheds for April first farrowing, but as we were saying earlier, I think you probably could do it in December if you had a door on your shed so snow wouldn’t blow in it.

Your sheds aren’t nailed to the ground like mine are.
No, you get a wind in April and it’s like bowling pins.

They can fly.

**What are you using on your September ground?**
We just moved the shed back about 10 feet and bed it normally, then with straw because our rotation is just one year of hog pasture. We had an oat crop the prior year, and that’s where we used the straw.

**What about other types of huts?**
In the ISU Extension fact sheet on outdoor production, the seven hut styles are shown. At the Western Research Farm, those are the huts we use. There are pros and cons to every style. The homemade A-frames are cheap—they cost just $100 with new material and labor. We’ve got some that are around $500. They range in durability from good to bad, and in pig loss, from good to bad. An important factor is the ease of mobility. If you get a sow over in the corner that farrows outside and you need to get a hut over her, do you want to take a tractor in there and pick up one that weighs 400 pounds and move it? Or do you want one you can move by hand?

I use A-frames. We make them in the winter time. We just use old lumber, or extra one-inch boards. We have built them using wood sides, but most of the time we use leftover galvanized, nailed on. We’re farrowing during a hotter time of the year, so our main concern, a lot of times, is keeping the sun off of them. So if we were farrowing in a colder time of the year, I suppose we’d want something a little more solid, but a lot of times it’s just to keep the sun off.

We have A-frames that we built. They have just an A-frame 2"x4" frame and then we put on treated 3/4" sheet plywood. On the bottom we put a sheet of plywood that covers the top and they just overlap. That’s usually pretty durable. My father-in-law has tar paper siding on his and we’ve torn up his used ones. They tend to tear up a little more easily because of the individual tar siding pieces. They’ll be rotted at the tongue and the groove part. We also used some Port-a-huts. I don’t like them as well in the summer. They worked well for us in the spring and the fall, because we drive a steel post down the center of the door of the Port-a-hut and then we take a half-sheet of plywood and slide it. If it’s going to be a cold day, we slide it so there’s just room for the sow to get out, or we can just take it all the way off and lean it up against the side of the Port-a-hut.

I use Port-a-huts almost exclusively. I’ve had A-frames and I guess I got away from them as they wore out. I stopped repairing them. The primary reason we’ve stayed with Port-a-huts is the ease in maneuvering them. You can put one of those on your back and carry it 300 or 400 feet if you have to.
Do you stake them down?
Yes. You pull the stakes, then you move them, and restake them.

How do you get the sows to leave the stakes in the ground? With my Port-a-huts, the sows are getting underneath the stakes and soon the Port-a-hut is over in the neighbors’ field.
I don’t know. If you get one that does that, you just put a few extra rings in her nose. Some of them look pretty tattooed.

With the Port-a-huts we use, we use the bare steel posts plywood on the fronts of some of them. Most of ours have half-fronts in them, and I usually put the roller in them. One thing that I think is really important is to keep the pigs confined in the hut for the first week or ten days. There are a lot of ways of doing that; some have rollers. I bought a pile of what I call the old bale and round corn cribs. I had what I call a chimney in them, which is an 8" tube made out of that same material. We just cut that off the length of the opening of the door and wired across the door. The pigs will go in one end and out the other and it takes them a good two weeks to learn to climb that like a ladder. It serves its purpose. It’s cheap. It lasts.

Again, the huts all have pros and cons. I hate to name names. I do like the Illinois hut; it has some distinct advantages. It’s light enough, and it’s portable, so you can move it by hand. There’s good sow access from the top or side if a sow is having trouble farrowing. It’s heavy enough so we don’t stake those down. I haven’t lost one yet, but we may. It seems to be relatively durable. The standard Port-a-hut is light enough to be portable but you’ve got to stake it down. That’s a disadvantage. It’s kind of hard to get in and work inside of them if you need to. The new English-style ones are heavy enough not to be staked, but then again, you can’t move them. Price comes into play quite a bit. I don’t know how you guys feel about it, but one of the advantages of this system is that it’s a low-cost way to get into raising hogs. So for farrow huts, I would probably lean toward the cheaper side although I wouldn’t sacrifice durability and some of those things. Don’t go to the cheapest thing available. I think pig-crushing has something to do with it too. The larger hut may have a positive impact on how many pigs are lost.

When you say Illinois hut, which one are you referring to?
The modified A-frame.

Wendell, What do you finish your hogs in?
We have some of the 12x20 Port-a-hut buildings. We put two of those out there with 160-170 pigs, and that’s fine when they get started. Usually we leave a few of the small ones up too. We do move those pigs up into the yard where we’ve got our corral and our sorting area; then they’re probably 200 pounders, so they’re easy to maneuver and ship out and sort, so I’m a little bit dishonest in saying they stay out there the full term, because we are pulling them up and putting them in a position where we can handle them a little better.
Now, it sounds like the idea with these hooped structures is that they're an inexpensive way to finish your hogs, yet your systems have that beat.

Well, yes, but I'm not an authority on hoop buildings. I think there are some advantages to the hoop buildings, too.

I think the hoop buildings take them through the winter better as opposed to pasture conditions.

**So hoop buildings take them through the winter a little better than your system?**
Yes.

**But you're getting it done, right?**
Yes, but I'm not going through the winter. We farrow from April-June. And it's pretty easy to take inventory. At the end of the year there's always 100 pigs left!
That's just about how it works.

**So, you're farrowing just once a year, in the summer?**
We start the 20th of April and we're done by June 5th, or somewhere in that range.

**Historically, do you sell at the lowest time of the year?**
That's the drawback to what we do. And in a year like 1994, that can be fairly painful. But look at this last year. Our spring farrowed pigs brought $49. Everybody was getting rid of their sows in the fall. I didn't want to sell mine for $16 so I kept them and rebred them. Those pigs came 'round the next fall and brought $49.

**So what do the rest of you finish them in?**
We finish in an old re-built barn. We took the top mound off and left the sides and clear roof on it. I got out of ISU in '77, put a pole shed up, built the wall, and put the concrete in it. It's Cargill type, but dad said he wasn't going to build anything that we had to leave as a monument to hog production. So everything we've got is something we can get a tractor in and use it for something else. If you didn't see hogs there you wouldn't know that we had any hog buildings.

We farrow two groups in the winter time in the buildings. And we finish all ours on concrete. We leave our April pigs out until we bring them up to sort them at about 200 pounds.

**Do any of you fall farrow?**
Yes, we fall-farrow some.
We exclusively fall-farrow.

**How do you other two finish your pigs?**
(Wayne) Keep in mind that this is a research site. Generally, ours are sent to another farm. As I mentioned earlier, the segregated early weaning pigs were ours. I generally keep replacement gilts. We finish those out in a 14x20 shelter which is actually placed on cement. We have four of those. Nothing grand about it—pretty low-tech and inexpensive, but it seems to work.

With the variety of farms in our system, we’ve got a lot of different ways of finishing. One of the things you asked about was, “How do you expand?” We started on this deep-bedded system about three years ago with an ag engineer, Dan Mayer, who’s an ISU employee now. Just take an old barn and put a woven wire ceiling at about 8' high. We cover that with one layer of straw “flakes.” And they make kind of a micro-environment. Then we put partitions every eight feet, so it’s kind of a Cargill building inside of an old dome barn or dairy barn. The moisture goes up through the straw. You have to put roof ventilators on, and we learned that one the hard way. But that’s been a very low-cost alternative—to use an old building to let us expand, and the pig performance in there is very good. In the winter time we put a curtain down in front of it with a pipe along the bottom and raise it up about four feet. Then if we need to get in there with a skid loader and clean it out we just roll it up and hold it with a piece of twine or a baling wire.

One producer from Fayette County has a lot of very good applications for remodeling old barns. He’s the one who’s featured in farm magazines once in a while.

**How high should the gates be?**
Three feet is fine. Just so the pigs have sleeping cells. Then if you bring small pigs in you can put gates in front of the pens that they don’t need to sleep in.

**How far before you have to go clear up? Or do you see the need to do that? . . . a 60' long cattle tier 30' deep?**
I probably have them every 20-24' so you don’t get those crosswinds. The bedding will stay about as dry as you can hope for, but you need big roof ventilators, or ridge vents in there, or it will just be raining on the inside of the barn when it’s cold outside. But if you’ve got the fence wire, it doesn’t have to be pulled really tight. That straw will blow off in the summer time, and you have to re-cover it in the winter. But that doesn’t take long. And it will be quite a bit warmer. You can just feel it when you walk underneath there.
Heat is always a problem in the field in the summer. Any comments about how you handle 100-120 degrees?

Last June, July, and August, we just had a 1,000-gallon tank and went out first thing in the morning, when we knew there would be a string of days like that. Once you start wetting it, they depend on it. But that’s just part of it. If humidity is going to be high, we just took a 1,000-gallon tank and put it under the shelters and then wet the holes, early in the day before they had a chance to get hot, and it seemed to keep them all right. When the pigs got older they would come up and they’d be in mud. Try to avoid that. Do it just enough so that there’s a wet spot for them to lie in. That’s how we do it. If you wait too long, until the middle of the day, you get past the point where they’re getting too hot, or the wind dies down at noon and if you take that tank out there then with the motor on it you’ve got a real mess because they’re all coming after you; they know they’re going to get that cool water. But that’s part of management: you look at the weather forecast.

We walk out several times a day and check. When it’s hot we make sure to check the farrowing pasture, and we usually treat them individually with a five-gallon bucket. If we have tank waterers we just go down and dip in and douse the sow. As far as the rest of the pens where the sows with litters have already farrowed, we drive around also with a big tank, a water wagon, and gas-powered pump. And we spray the water right in the A-house on the sow and that way they have a little wallow in there. One of the problems with that is that sometimes, especially toward the first of the summer or toward the end of the summer, we get some very hot days, probably followed by a cool day—then we have to go back out and bed the next day. And it’s a high labor requirement, but it’s a part of the management. You have to stay on top of that. This year we never had to rebed because in July—you know how hot it was—we had to go out twice a day sometimes to water them down and make sure they were okay.

**What about genetics?**

In our operation my father-in-law had a 500-gilt system in the past. And he had always artificially inseminated sows from his boars. He was concerned about maternal traits, milking ability, and mothering ability. As a consequence we had very prolific sows. One of the detriments was that we did that at the sacrifice of carcass quality and backfat. He quit pasture farrowing three years ago and he’s all inside now. So we used to just get some of his boars. We were always in the same program. We got our sows and our gilts originally from him. Now, we’ve had a problem—we split the herd and we’re doing half of them with a maternal boar and half of them with a terminal boar and we use a Tamworth (?) boar and they came out too fat, just like little butterballs. We have since gone to PIC line 326 boars put on our own gilt herd; they came back drastically improved. We were surprised at how drastic the improvement was. We went from losing $1 a hundredweight to making $2.50.
You won’t be able to keep gilts back?
We’re going to keep them one year—this year we’re keeping the gilts—and we
would never keep more, I mean we wouldn’t go back to 325 or anything. This
year we’ve gone to a purebred Duroc. His father was Nathan, who stands at SGI,
and Nathan ranks in the Duroc registry as one of the top ten in three years for
maternal traits. They also have excellent loin and back fat. So what we’re hoping
to do is continue to save back our own gilts. I’m a little afraid we won’t be able to
do that for very long—be able to keep our own gilts and still have a good terminal
animal, and if we have to buy our own gilts, that’s going to be a big expense. We
can’t afford to keep half of them and sell the other half after one parity and that’s
why I’m interested in this deep-bedded system for winter farrowing: we’ve got to
find some way to keep these gilts around if we’re going to pay $200 or more for
them.

We use kind of a hybrid cross, it’s not Farmer’s hybrid cross, but basically this
year we’ve used Duroc boars that we got out of Minnesota. Our sow herd is kind
of a large white Hamp-cross sow. We probably have what most scientists say is a
fairly convoluted breeding program, but they survive and they’re fairly durable
and our carcass quality is fair. For backfat last year, everything we sold was 1.01.
It’s not anything too dramatic, but it seems to work.

We’re using a lot of the Scandinavian breeds that originated from SGI. One thing
that we’re looking for is kind of a contradiction in terms: a lean, durable hog and
trying to get the best balance. And I think comments this morning about
profitability vs. the highest yielding carcass and some things like this just make a
lot of sense. We’re primarily on a purchased gilt system. An F-1 gilt, large white
Landrace. But we’re not in a position where we really want to accept these high
cull rates and we’re using the same line as Paul is using, or a Fjord boar with
paternal characteristics. But we’re finding out that the carcass quality is also very
good, which was a pleasant surprise. So, it’ll probably be as close as we’ve ever
come to finding the perfect boar, and I’m sure other breeds have it, but I didn’t
look at the Duroc data as Paul had. We kind of jump in both feet at a time; we
bought quite a few of these boars and just started selling pigs out of them here last
week. These were outside-grazed pigs, the little short, fat barrels, and the fat-o-
meter reading on them was 52% lean. And we normally would have liked a 46%
lean. It didn’t slow them down that much. It maybe took them a little bit longer to
market—these farrowed in early September—but they still weighed 240 pounds.
And we have some pretty cold days. Once in a while some things you do in the
hog business work out. You’d rather be lucky than smart!

Are these hogs fed to be lean-gain hogs? Do you incorporate that kind of
thing in your feeding?
Yes, they’re phase-fed and split sexed.
That's another thing we find is helpful about big groups: it allows you to split sex them. We've got big lots we feed them on, probably average 180 head per lot, just big lots, milking barns. When all those pigs come off the pasture, you can split sex them really easily, and there are so many of them it's not a problem. That really pays off when your kill sheet's back.

We find heat in the summer to be one of our main challenges. We do have some nice steel houses, and we've got some Port-a-huts. I can see the advantage of the A-house when it's hot and the disadvantage when it's cold, and I wondered if anybody has ever experimented, but we set ours north and south. If they just paint half of the west roof white and leave the east roof dark, they can take advantage of warming up when it's cold and the white roof reflects heat when it gets hot. Has anybody done anything like that?

I can put Port-a-huts and A-houses in the same pasture and they'll fill the A-houses first; then they'll go to the Port-a-huts. Basically, it's the heat. If it gets too cold, they'll reverse. They'll unload those A-houses first.

Where we had the various styles of huts, the first three years we couldn't see a hut preference other than the one plastic one, which was translucent, which got really hot. It was 15 degrees hotter than ambient temperature when the sun was out. When you're doing that, keep in mind how close they are to the feed and the water in the pen and how they are situated: uphill, down. If you're looking at a sow's preference in huts, make sure the huts are all positioned in the same place, equal distances from feed and water.

How wide is a Port-a-hut?
It's 4.5 feet wide and 6 to 7 feet deep. But it's square feet that matters. Our A-houses are 6'x8'. We talked earlier about how sows like more area. That might be part of the preference.

I've got both sizes of A-houses. I think it's the temperature. (different speaker) We've experienced that too, but ISU data will refute that.

The A-houses are painted white, though, and the Port-a-huts are silver. If you stick your head in the back, you'll notice a difference on hot days. I use quite a few Port-a-huts, and when it's hot we just put blocks under the back end of all of them and they stay that way the rest of the summer.

What's your litter average?
It depends on the weather. I've varied. Do you mean at time of conception or how many gilts you started? That's the big thing, when you're running all gilts, is how many gilts you have to turn out. We usually try to get 90%.
When a sow farrows, how many is she going to wean?
It varies from 7-8 on the year, down to 6 in extreme cases. If you have an extremely bad storm you may lose 3 or 4 litters, maybe 5 litters. You’ve just got to be able to face that unless you want to sit there and watch them all during an 8” rain storm. But once in a while you just can’t do that.

Our litter average in gilts is about 8.1; we’ve been as high as 9. In 1993 we were down to 6.7. It was wet, and you’ve got to watch that.

I concur. In the nine years we’ve been farrowing, ours has been running an even 8.

In 1994 ours was 8.6, but that was an exceptional year. In 1993 it was about 7.5, 7 on the pasture. Our birth to weaning death loss was 15% in 1993 and the rest of the years it averaged right around 7% (pigs that die before they’re weaned). They’re born live.

I guess we have never been worried in our operation about the number of pigs born, and maybe we have a different operation than a lot of people. Because a lot of what we made money on is the gilts that we feed from 240-250 pounds market weight. If you do a good job of selling it, you’re talking about hitting a better market. A lot of times you’re going hit a hotter market in June, July, and August. And then there are the tax advantages. A lot of times, up until ‘86 it was big money, but now you’re saving 15%, and if you’re not incorporated—it depends on whatever your tax situation is—but if you aren’t paying self-employment tax on those girls, that’s a big boost to your feed cost. I mean, if I was in it to worry about my pigs per litter, I would have quit a long time ago. But I’m in it to make money, and that’s always been a big part of it for me.

Gary, how do these modified A-frames average for litters?
It varies. The F-1 gilts that we bought we’ve jumped up significantly, mainly because of their temperament. They just don’t lie on the pigs, and that’s been a big eye-opener. You can tell by my comments that I’m enthused about these. But they’re just darn good mothers. They have their litter of pigs, they just lie there. If we don’t have any coyote problems, we’ve got wet weather, but we try to farrow during the most moderate times and eliminate some of those stresses, and have well-drained fields; we don’t try to put sheds on flat fields. And I’d say the numbers that I look at on our farms overall don’t differ much from what I read in farm magazines. But you’ve got to realize the limitations. I’m farrowing in a shorter period of time than these other guys are and I’m going with a very prolific breed.

So you’re saying you might be up to nine?
Oh, we’ve had some 10’s. You can have 24 sheds in a pen and wean 250 pigs; at the same time, we’ll get 200-bushel corn one year and then the next get only 120-
bushel corn, and then we get an MMA problem, or a milking problem, and it can pull it back to 6 or 7.

**When do you recommend weaning?**
Four to five weeks. We tried earlier. I wish we could find a way where we could get an off-site nursery that we could rent for 45 days and then bring them back home (*laughter*), or find some rental farmer who has one sitting empty. We’ve looked at buying these modular hot nurseries, but you can hardly use them enough, and you really can’t cycle two groups through them in the spring—not when you’re farrowing over a six-week period. Theoretically, maybe you could get two groups through, but that’s one of the things we’re talking about in Henry County: do we put a group of people together and go to an off-site segregated early-weaning nursery and have cooperators go into it jointly and everybody schedule a time slot? I don’t know.

I’ve thought about trying to design some type of in-field nursery that could perform the same function. One could put up some panels and make sure the water, the feed and everything were right there for them: throw all your pigs together in a nursery situation. Any ideas?
Well, I’ve got some neighbors where I live who have bought semi trailers, whatever you want to call them, from the junk man, and then put in a shallow pit inside that.

I mean a nursery that’s right on the ground. A dirt nursery.
No.

Maybe you could look at some of those buildings for something like that.

You mean if we get, say, three per year, something like that, we’ll wean a litter, a litter per A-shed, and put a hog panel around the front. We end up with a lot of runts out in the field. With the nutrition that we have today, they just don’t take to that environment for some reason, and I’m not sure why.

**Do you think its parasites?**
I don’t know what it is.

You purchased females and kept some of your old ones. What do you see in the adaptation of these purchased animals compared to animals that previously farrowed and were raised on this field? What are some of the problems you encountered? How did you handle them?
One problem is that they’ll lie outside and get sunburned. When you mix them, they’ll fight and you’ll get lame ones. We try to get them as young as we can. If we can get them at 200 pounds and get them acclimated, because there are different bacteria and pathogens on the farm that they’ve got to work up an
immunity against—I’m not sure what the minimum time is—but it’s sure not a situation where you can just dump them out of the truck and into a boar pen. I’d say probably a minimum acclimation time would be six weeks. Now boars that we breed in December we buy in August, so they’re sitting there quite a while, because they’re generally born in February and March, but you just don’t have a problem with them going lame. Have boars be 9 months old, 10 months old when they start breeding.

I’ve experienced sows that have never been out in the field. Once they go to the field, they’re scared of A-houses, they’re scared of platform water, they’re scared of platform feeders. Are these some of the things you’ve experienced?
Yes. That’s why you saw that hog panel in front of the A-shed. You take her out there in a hog cart and back right up to the door and put her in there and lock the door, then nail the hoop up. Leave her in there for two or three hours and then let her out. And maybe for a day or two you carry feed and water to her by hand. It’s pretty labor intensive, but otherwise she’s just likely to go anywhere and have her pigs. You’ve got to train them. With the hog tanks, we wire the lids up, same for the feeders, because they’re hand fed prior to coming out there, and they just don’t know how to raise the lid up, especially if they’ve got rings in their noses too. A lot of it’s just good husbandry, anticipating the problem: we’ve all had to learn by experience, and we’re telling you these things because we’ve had to learn the hard way.

I know you have to keep the little pigs isolated in the hut for a week or 10 days—or do you? How do keep them from mixing too soon?
We use a 2"x8" board that sits right in the front of the A-house and in about a week they’ll be able to jump over it. Then you’ll want to take it off. If they jump out after I do chores at night, they’ll be lying outside all night, and that’s a problem if they can’t get back in.

We usually don’t do anything. We keep them in to within 4 or 5 days of weaning in the same pen, and let them fend for themselves. They’ll stay pretty close. If you get closer than 4 or 5 days, then they’re starting to run around, and you’ll get some coming in there to rob. But we don’t worry about it too much.

The other thing is to make sure you don’t put the sheds too close together. Space them quite a bit apart—rows too. That eliminates a lot of problems. If you get a gilt, she’ll get confused and not know which shed is hers and there is one in there who’s already had pigs and she wants to go in and have pigs with her. That’s one thing that spreading them out will help with, although it won’t solve the problem completely. But get them as far apart as you’ve got room for.

(Another speaker) This is important. I never have more than four or five days age difference with pigs that are together. It’s just too risky. In yards where there’s a
7, 8, 9, or 10-day age span, you’ll find the weaned-pig average drops pretty dramatically.

(another speaker) I concur. When we set up a farrowing pen, with the fencing we use, we start at one end and let them farrow for 4 or 5 days and then we move them and put a dividing fence in and let them farrow and move them again, so that we have the age breaks right. We also try to confine them in the hut too. If you’re farrowing all gilts over, say, a three-week period, you don’t want ones that are a week old mingling with those that are three weeks old. It doesn’t work.

What about if you’re using hot wire if you’re trying to keep sows out? If you have two groups of 10 next to each other and you’ve got hot wire between them and the pigs are two weeks apart, do the pigs intermingle then?

Our electric fence happens to be electrified netting. I have used just single strands on fibreglass posts, and I found that it helps to space the huts out a little further, as you mentioned. They do run back and forth some, but if the sow doesn’t go with them, they don’t seem to stay away too long until they get a little older, and by then, I think they compete more. I saw one novel idea where a man set up farrowing pens and had an individual pen for each hut. He basically used three strands barbed wire, and he put a hut in each one and then they would cross. And at the intersection of four pens, he laid a water line and had a waterer. His comment was that if he confines the sow, the pigs won’t go anywhere until they get to be 3 or 4 weeks old—ready to wean. He had to hand feed the sows in every pen every day, so obviously, it’s kind of labor intensive. He farrowed maybe 40 at a shot.

You put up two electric wires, one here and one here, and you have about 12-16 feet between them. Little pigs have a tendency to go into that grassed area, but they don’t have a tendency to go beyond that until they’re three or four weeks old. Then they’ll go underneath the wire.

We talked about some of the problems and pleasures of outdoor production. There are lots of abandoned confinement houses around, and given the time of year you’re farrowing, it might be easier just to lease that vacated farrowing house for that one-time farrowing. If you’re thinking about putting up all the fencing and the cross fencing and the waterers, it’s because you don’t have such a building, or you’d be using it.

I’d say that pasture farrowing is a lot cheaper even than renting a building. We have a really competitive area for renting buildings. I looked into renting a finishing building because that’s what limits our pasture farrow operation. We only have room to finish 1,100 pigs on our farm. And since I farrow most in the summer, I can only farrow enough gilts to have 1,100 pigs come fall. The other thing is, I can have 1,100 pigs at one time, and you have to use a farrowing house pretty much continuously. If I farrow 140 gilts outside in the summer in a 20-stall
farrowing house, that would be seven times farrowing, and in the winter time I get
tired of turning sows. In a really good farrowing house, where it’s all on decks
and stuff, you wouldn’t have to turn them out. I like dealing with things all in big
stages, so I’m not always farrowing every month and always doing nursery chores
every month. It’s kind of just a big all-at-once.

You’re probably doing it at the same time as field crops or row crops. Thank
goodness we have long daylight because you’re putting in long days. Whereas
there’s not too much competition for your time during winter, when you stay
inside and feed those sows once a day.

I did my labor study, and it really isn’t as much as you’d think. That’s why we
farrow May 25, because if we aren’t done planting corn by May 25, we’re going to
make more money taking care of the pigs. Corn and beans are in by then, but then
there’s spraying and cultivating. My dad and brother are in the operation, so I
really think it’s a good use of that time. Our biggest problem with finishing is
there’s a lot more labor involved, for example, with scraping manure in our
facilities. We’re moving manure, too, but that’s in the winter time, so we’ve got
lots of time to do it. It works. Our finishing is taking us a lot more time compared
to a confinement operation.

I think farrowing that sow and taking those pigs to weaning comes out to about 4
hours per litter. You have to bear in mind that in this farrowing system you have
mother nature working in your favor, and you really don’t have to spend as much
time out there as you might think. I farm 800 acres and farrow 300 sows
beginning the 20th of April. My labor bill last year was $2800 and most of that
was my own kids. I only have three kids. It’s just right.

We all probably use tractors—unlike when our dads or grandpas were doing it.
We’re cutting corners. We’ve got all the angles figured. It really doesn’t take
long to do it out in the pasture.

Don’t you find that when you need to be there the worst is when the
weather conditions are too poor to be in the field anyway?
Yes.

And when weather conditions are ideal for planting, the pigs are getting
along fine?
Yes.

I think the other thing you have to look at too, at least in Henry County, is that
most farmers could add on 160-240 acres and they wouldn’t have to buy a thing.
We tend to over-equip to get that field work done in a short period of time. I work
with a lot of small farms (by my definition, that would be 2 to 300 acres), and
there are a lot of 8-row corn planters on those, because they know the importance
of the timing of the hogs, and that you have to be there, whereas with corn, you’ve got a little bigger window. We’re notorious for planting in late April, but they’ll plant at night. It’s common to see the hogs taken care of in the daylight and planting done after dark, but it doesn’t take long to plant. This minimum tillage takes one pass in the spring, if you cultivate flat.

It’s also easy for us to make a decision to purchase a 60-foot sprayer because that helps.

You also have to raise a cover crop most of the time every three years.

Every year.

Which Iowa State tells you is not profitable.

You need the straw for your bedding anyway.

Not if you had a confinement building.

**Why did the universities get us into wire flooring and glass?**
How many people make their money selling those A-frames to you, and the equipment associated with it? That’s my opinion as to why people went away from it. We saw the manufacturers who were selling the buildings and were pushing all this, and they were making money doing it and they got us convinced.

I’m not saying the university is pushing it, but they might have been.

I remember in 1970, we were supposed to build. In ’75, I came out of Iowa State thinking I should build buildings. Luckily my dad grabbed hold of me and said you can go ahead, but not here. Find another place.

**Do you hire somebody to drill your beans?**
You can hire $6.00/hour labor to drive your field cultivator.

I think that there’s a lot of custom work done—planting, harvesting. Guys who concentrate know that the money is in the hogs.

We’re not training a new generation of stockmen; that’s what I’m concerned about. You talk about having your family out there working with you, and that’s fine. My family’s been out with me, but I’m hiring a lot of Iowa State students, and it’s hard to find any with experience as stock people. They want to drive the tractor or the four-wheeler. But as far as them making sure the hogs are bedded at night or wetted down in the morning...

That’s what I think all the big guys are finding out too.
PASTURE FARROWING CALENDAR FOR NORTHERN CLIMATES

November 19 - Vaccinate gilts.
December 10 - Turn boars with gilts.
December 30 - Remove self feeder.
February 10 - Last date to remove boars - No June litters.
March 15 - 2nd vaccination - spray - worm - ring.
March 25 - Pregnancy test questionable gilts.
March 26 - Start moving gilts to field that are closest to farrow. Use bulk ration in self feeder prior to farrowing if pasture lacks good forage stand. Also may use high level antibiotics.
April 1 - Farrowing begins: Mark gilt to identify her shed. Record ear tag - Record # of pigs with gilts and farrow date. Lock gilt in shed 1st day - If nervous, use hog panel pen to feed and water. This also keeps other gilts from moving in with her. Check shed 2-3 times per day to keep from doubling up in shed. If gilt has milk, lock her in. Iron and LA200 shot and clip teeth with litter of 7 pigs and above.
April 8 - Move all gilts that have not farrowed to next pen.
May 10 - Castrate at 4 weeks and vaccinate and spray.
May 20 - Start weaning at 5-6 weeks. Wean 1/2 sows per pen. Wait 2 days, wean balance.
May 20-July 10 - Breed - No November farrowings.
June 1-July - Move pigs to finishing area. Keep replacement gilts on pasture.
August 1-31 - Build fence on new seeding - next year’s pens.
August 15-30 - Purchase boars for December 10 breeding. Prefer boars born in February. 1 boar to 10-15 gilts. Short farrowing period.
August 15-31 - Move A-Shed 10’ - Farrow on clean ground.
September 1 - Vaccinate sows.
September 10 - Sows start to farrow.
October 31 - Last sow farrows.
- Move A-Sheds and fill with corn stalk bales for spring farrowing. Cover extra stalk bales for next September use.
November 24 - Last day to move pigs to finishing.