

5.

Page Position and Readership

HOW CAN AN EDITOR be sure that he is holding readers throughout the magazine, from the front cover to the back? One way, of course, is to check readership surveys and see what the page scores are on each page. This is not a final answer, however, because the appeal of different articles and advertisements will vary.

Suppose that an attractive full page article on a subject of interest to the reader (possibly hogs in Iowa, dairying in Wisconsin) appears on page 13. The page scores 81 per cent for men. On page 79, there is a two-column article on sheep (not so important) with no illustration. It scores 30 per cent for men. Does this prove that readership in the back of the book is low? No, because a sheep article would score low with Iowa and Wisconsin readers in any position. A hog or dairy article would score high.

To find out whether the editorial matter is pulling readers through the book from front to back, use the split run. Print Article 1 on page 17 for half the run and see that it reaches half the sample of farm people

interviewed. Then shift Article 1 to page 66 for the second half of the run. Get a readership score for Article 1 in each position.

In the same issue, print Article 2 on page 66 for half the run. Then shift to page 17. Get a score for Article 2 in each position.

If all the interviewers were to start from the front of the book, reader fatigue will almost automatically give the copy on page 17 a better score than the copy on page 66. What we do, therefore, in all readership surveys, is to start half the respondents in the middle of the book, go through to the last page, come back to page one and go through to the middle. The other half of the respondents are taken straight from page one to the last page. This device presumably equalizes reader fatigue. Unless this device were used, we couldn't learn much from the tests described in this chapter.

Our first test in transposing articles was in *Wallaces Farmer* (November 5, 1949). We switched two-column articles on page 12 and page 27. In each case, the article suffered when moved to page 27.

This test was repeated November 4, 1950. This time the shift was from page 12 to page 50 in a 64-page issue. We found we lost readership in the shift from page 12 to page 50. (1)

Faced by this evidence of weakness in the back of the book, the editors began to make changes. More and stronger copy was used in the back of the book. Two popular departments were given a permanent position on the inside back cover and the facing page.

We checked again in *Wallaces Farmer* (March 19, 1955). This time we switched picture pages — one on

page 17 and one on 81 in an issue of 100 pages. This time page 81 lost a little but not more than the expected experimental error.

On October 1, 1955, a similar split was tried out in an 80-page issue. Two articles — each two columns in length — were transposed. Their titles were "Apply Nitrogen in Fall" and "Fertilizer Helps Stop Erosion."

Following are Read Most scores for men. The sample had 68 men and 100 women in A; 100 men and 100 women in B.

		"Apply nitrogen"		"Fertilizer helps"	
		No.	Per cent	No.	Per cent
Page 18	. . .	28	41.2%	47	47%
Page 66	. . .	25	36.8	51	51

Scores for women — much smaller — showed about the same variation.

In the 92-page March 16, 1957 issue (*Wallaces Farmer*) a similar split was tried. Again two articles — each two columns in length — were transposed. Each dealt with some aspect of cattle feeding.

Read Most scores for men on the two articles follow. The sample has 100 men and 100 women in A: the same in B. Since the sub-sample in each case is 100, the number and the percentage are the same.

		Feeder cattle	Economy supplement
		Per cent	Per cent
Page 26	46%	41%
Page 70	48	44

Later surveys were designed to see if these gains had been held. For instance, in the January 16, 1960 issue

(*Wallaces Farmer*) a corn silage article was run on page 18 in the A section and on page 60 in the B section. The "Service Bureau" was run on page 60 in A and on page 18 in B. Read Most scores for men are:

	Corn silage Per cent	Service Bureau Per cent
Page 18	29%	51%
Page 60	34	44

A shift from page 24 to page 71 showed similar results. Read Most scores for men follow:

	Good ratings Per cent	Farrowing house Per cent
Page 24	17%	47%
Page 71	21	41

Women had lower scores on these articles which were aimed primarily at men. The pattern of response was the same, however.

All of these reports, except the picture page split in 1955, dealt with two-column articles. *Wisconsin Agriculturist* (April 2, 1960) tried a shift with page articles.

Here are the scores for the two pages. The switch was from page nine to page 74. The article was "How Thick Should You Plant Corn?"

	Men		Women	
	Page 9	Page 74	Page 9	Page 74
Any This Page . . .	66%	59%	24%	21%
Read Some . . .	64	51	12	11
Read Most	44	36	11	6
Picture and caption	52	47	22	18

There is a slight edge for page nine, especially with the Read Most score for men. The other differences are minor.

Here are the results of another article, "The Farmer's Job in Civil Defense:"

	Men		Women	
	Page 9	Page 74	Page 9	Page 74
Any This Page . .	53%	52%	39%	50%
Read Some . . .	44	51	38	49
Read Most . . .	32	32	31	33
Maps and captions .	41	41	24	39

This comes out even, except that page 74 has the edge with women. This has happened in other splits. Apparently some women start to read with the home-making department and go on through to the back. This sometimes gives a stronger women's score in the back of the book than one might expect. The best spot for dual purpose ads or editorial matter may be in the area in back of the homemaking department.

If scores for both pages are combined, we get the following:

	Men		Women	
	Page 9	Page 74	Page 9	Page 74
Any This Page .	59.9%	55.5%	31.5%	35.5%
Read Some . .	54.0	51.0	25.0	30.0
Read Most . .	38.0	34.0	21	19.5
Picture (maps) and captions . .	46.5	44.0	23	28.5

These combined scores make it clear that there is no significant difference between the two positions so far as reader interest is concerned.

The custom on *Wisconsin Agriculturist* and *Wallaces Farmer* has been to run tests like this every year to see whether readers are reading all the way through the magazine. These results are of great interest to advertisers. A good ad on page 80 presumably would have just as good a chance for readership as one in the front of the book.

Corn silage fits ration for sows

Some research indicates that silage can increase litter size

IF YOU'RE already feeding corn silage to your cattle, you may profit by feeding your sows silage, too.

"I've fed my sows silage during gestation for 3 or 4 years," says Maurice Beaver, Wapello county, Iowa. "It's easy to put some extra corn silage in the auger wagon each day."

He feeds the sows at the same time he feeds his cattle.

Sows fed properly supplemented corn silage ration produce at least as many pigs per litter as sows on more common rations. Some research even shows there can be an increase in litter size.

Other research will indicate that pigs farrowed from sows fed a corn silage ration may outdo pigs from sows fed some of the more common rations.

You'll be most apt to profit from feeding a corn silage ration if you are presently self feeding grain and supplement to your sows. With a good corn silage ration, you can cut your per sow feed cost to around 15 cents per day.

Purdue University, in a recent experiment, fed each of 10 sows 1.5 pounds of protein plus 11.2 pounds of corn silage per day. The group averaged 9.9 pigs weaned per litter.

With protein at 6 cents per pound and corn silage at \$10 per ton, the feed cost figures about 14½ cents per sow per day.

However, if you are feeding a limited ration of concentrates to your sows, you may not profit as much by changing to a corn silage ration.

Some Iowa farmers have built silos for their sow herds, but it is not a common practice. Fifty sows or more are usually

required to justify a silo for your sow herd alone.

Only choice-quality silage makes good sow feed. Finely cut silage is best. Sows will sort a coarsely cut silage. And they have a strong preference for silage made from corn before it reaches the hard dent stage.

Iowa State University workers think it's best to start feeding silage 3 to 4 weeks before the sows are bred. Otherwise, don't start them on the corn silage until after breeding is over. Changing feed too close to breeding time may cut your litter size.

Feed the corn silage free-choice on a platform or in a trough. Each sow needs 8 to 10 pounds of silage.

A 20 percent protein balancer is used by Iowa State University to supplement the corn silage ration. The balancer can be made either from one of the university formulas or by mixing equal parts of shelled corn and a 30 to 35 percent protein brood sow supplement.

Feed the 20 percent balancer once each day in the following amounts:

Gilts

Flushing period . . . 4 to 5 pounds
First 10 weeks
of gestation . . . 3 to 3½ pounds
Last of gestation . . . 4 to 5 pounds

Sows

Flushing period . . . 4 to 5 pounds
First 10 weeks
of gestation . . . 2½ to 3 pounds
Last of gestation . . . 4 to 5 pounds

When you are starting the sows or gilts on corn silage, it's wise to add shelled corn on top of the silage to encourage them to eat it.

Corn silage is not always the same year after year. The amount of concentrate must occasionally be adjusted to the amount of corn in the silage.

Figure 5.1

Read Most

Men

Page 18,
29%

Page 60,
34%

Page 18 Versus Page 60

To see whether readership stays high all the way through the issue, articles are switched from front to back. In this case, the corn silage article ran on page 18 in the A version and on page 60 in the B version. Read Most scores are given above.

Page 60 (in an issue of 76 pages) is as good a position as page 18.

Wallaces Farmer, November 21, 1959

HOW THICK SHOULD YOU PLANT

CORN

W HICH weather may not arrive quite as fast as you would like, but if it's any consolation, corn planters should be getting underway in less than two months.

Now's a good time to review your plans for this year's crop. Let's assume two planters that's adapted to your farm type, fertilizer based on soil tests and per acre of the seeds to using seed track planting. These are rather standard practices when help to in any good yields. But how close must thought to how many plants per acre should be planting per acre?

Most likely you plant somewhere between 13,000 and 16,000 plants per acre. Planting one kernel every 10 inches equals about 13,000 plants an acre at harvest time. One kernel every 8 inches should give a population of 16,000 plants.

Seeding 1 bushel every 4 acres should give you a 16,000 to 18,000 plant stand. For 40 to 45 bushels a seed drop of 16 to 18 seeds per 10 feet of row is needed to plant this much corn.

Even with average soils, the chances are that you're wasting money if you follow recommended fertilizer practices with stands below 13,000. Many farmers are now asking sufficient plant nutrients to maintain stands of 16,000 to 18,000 plants per acre.

16,000 Plants Is Average

Yet, 16,000 plants per acre may be the limit for consistent high yields on the average farm. This advice comes from the recommendation of a well-known seed company, who says, "The only place I would recommend a higher plant population would be to farmers willing to take a risk of lodging on fields with high yielding lands."

That plant populations of up to 24,000 plants an acre are not unheard of in Wisconsin. In that county, one farmer has found that his corn yields by using unusually high amounts of fertilizer and planting from 20,000 to 24,000 plants an acre. However, lodging is a problem at times. Lodging, one of the big problems in high plant populations, gets worse when you go above 16,000 plants per acre.

High Yields are possible with average planting rates when fertility is high and moisture is plentiful. George Wood, Wisconsin county, has discovered. He gets in over 90 bushels of corn.



WISCONSIN AGRICULTURE

April 3, 1963

A 9

By Bernie Monaghan

As a general rule, hybrids with high yield ability will tolerate thick plantings. But there's a definite need for hybrids that are better adapted to high populations.

As a result, some farmers are marking time while they wait for the development of hybrids that are adapted to these high plant populations.

One of these is Dick White in Stock county. "My corn stand usually runs about 14,000 plants an acre," says White. "I like to see even higher rates if it weren't for the problem of broken stalks at harvesting time. Right now I'm waiting until better hybrids are developed that are more suited to high population stands."

In University of Wisconsin experiments over the past few years, researchers have studied the effects of plant population on several hybrids with a range of maturity from 93 to 133 days.

In some, plant populations of 12,000, 16,000, 18,000 and 22,500 the researchers found that the most consistent high yields came from using 16,000 plants per acre.

Some of the limiting factors in high plant populations are moisture supply and type plant food and the kind of hybrid used.

Under dry soil conditions a pattern that doesn't crowd the plants in the row results in less drought damage. This is another area in which researchers are working with the hope that new planting patterns may solve the problem of increasing plant populations. Although lodging may be secondarily reduced by making the hybrid with resistance, crowding plants in the row does lead to more weak root systems and less stalk strength.

There is some indication that narrow row corn may be the answer to the problem. Narrowing the rows spreads out the plants within the row, giving the individual plants more growing room.

In other University of Wisconsin experiments, yields were stepped up by 15 percent from 40 bushels to 46 bushels an acre by planting corn in 30 inch rows. This would permit a higher plant population provided the facilities were there to support it. However, tillage and harvesting problems will prevent early adoption of the method.

High plant populations do seem to give down small corn ears. But with mechanical picking, this no longer means there's any reason to be afraid of high plant populations to handle by hand picking, and it has little effect on total yield and shelling percentage.

Now farmers who will have to be concerned to get the most benefit from high population is choosing which limits the yields from tall corn. One solution might be dwarf corn.

While some of the results that have been seen in some growing, farmers like L. B. Kalk, Wisconsin county, Elroy, are experimenting with dwarf corn and plant populations up to 26,000 plants per acre.

In establishing a plant population which will produce a high seed yield, there are some things you must remember:

Have Planter Adjusted Right

Drive slowly, while planting at 16 inch rates. Two to 3 miles per hour should be your maximum speed if you want an accurate stand. At higher speeds you'll get more skips and burning of plants. The recommended planter speed and seed control seed for high seed yield. To obtain good stands proper planter adjustments are necessary. Usually about 10 percent of the kernels planted don't grow into mature plants. To compensate for this loss, over-planting is recommended.

You can test the planter's row before, drilled by dropping the opener on a bare section and driving at the speed to be used in the field. This will show the kernels on the row where they can be counted. Count the number of kernels dropped in a 16-foot distance to get an accurate average.

Figure 5.2

Corn Page

Page Scores

Page 9

Men 66%
Women 24%

Page 74

Men 59%
Women 21%

Page 9 Versus Page 74

This is another example of transposing pages in order to measure the flow of readership through the issue. In this case, the corn article appeared on page 9 of the A section and on page 74 of the B section. The defense article was on page 9 of the B section and on page 74 of the A section. This issue had a total of 84 pages.

Differences are not significant except in the case of wo-

The Farmer's Job in Civil Defense

by Jim Allen

RURAL people won't get off too easy if this nation ever suffers a nuclear attack. There will be last problems to these how to handle the city people who are evacuated to rural areas, and how to cope with radioactive fallout.

Some counties have already made plans for handling evacuees, according to Dan Jensen, civil defense coordinator with the Wisconsin Department of Agriculture. Others have just started work on this problem.

First of all, people moving into a rural area will cause traffic problems. These can be handled by auxiliary police forces. Jensen says that many local governments already have auxiliary forces which are called out for special events.

Police Will Need Help

Areas which have not made plans for evacuating their police force will need to send people on the spot of the moment to direct traffic. Both local residents and evacuees can be prepared for this service.

Housing evacuees will be another problem. Civil defense plans call for housing them in public buildings whenever possible, but many will stay in private homes. When evacuees come to an area to wait out the emergency, they will register and be assigned to housing. This service will help get families back together after the emergency.

Evacuees will be asked to bring food, extra clothes and linens. But they won't take enough food to last them through a nuclear attack. This will put an added strain on rural food supplies.

There's no substitute for the well-stocked pantry or fruit cellar. There should be enough food on hand in each home to last two weeks. Figure double that for the possibility of having to take in some evacuees. Food and fuel problems will be solved by the state and county civil defense organizations. There's a running inventory of food and fuel kept on hand. Government officials will be able to channel food and fuel into areas of greatest need.

Since Wisconsin is a food-producing area, farmers may find some of our food supplies may have to be moved to other areas, to reserve shortages there. The figures that careful estimates of groceries on hand in the retail stores along with the Wisconsin farm production, should see us through any temporary emergency without food becoming too short.

One of the long-range difficulties will be control sources of food and fuel being cut off or destroyed. This could cause severe shortages long after the danger from blast and radiation has passed.

During the emergency many rural areas may have to be evacuated because of fallout. Home building industry can protect everybody from radiation, but there are few of these in Wisconsin. If conditions are right, the entire state would be covered with fallout.

One of the biggest problems will be to protect food sources from radioactive fallout. This will start right on the farm—garage, shed and other outbuildings are too likely to become contaminated.

Once the fallout starts to spread in a rural area, farm families will need to protect themselves and their livestock from fallout. They kind of shelter is helpful. People should move to the basement, block up the windows and wait for the danger to pass. The danger may be around for two weeks or so, so this will take planning.

Move Livestock Under Cover

Livestock should be moved under cover. In many cases an ordinary shed will cover cattle from radiation sickness. Many Wisconsin farms have stock, masonry walls, which are excellent radiation shields. In some cases farm families will be better off in their dairy barns than in their homes. Not only will there be more radiation shielding, but the cows will be in much better shape if there's something on hand to care for them.

Flood rats can be a problem on some farms.

Flood stored in the open may be contaminated. Silage kept in covered silos, hay from the mow, and other feeds stored inside will be safe.

Farmers with auxiliary electric generators will be lucky. They can be sure of having their pumps and barn cleaners working. And the milking won't have to be done by hand.

After the radiation danger has passed, there will be people around to check feed supplies for contamination. Some radioactive feed will be safe to use after they have been kept a while. Days of quarantine may be contaminated only on the outside of the bag. Silencing crops may be harvestable after a few weeks when it's safe.

Don't handle animals which have been outside during periods of fallout. They may have lethal amounts of radioactive dust on them. After it's safe to go outside it's not right to feed and scare them, though.

High Schools Will Help

High school science teachers will be responsible for part of the radiation monitoring. In Wisconsin, 200 high schools have received radiation detection kits to be used in science classes. This equipment is also available to local civil defense organizations for training and monitoring purposes.

Nearly anything that isn't damaged by water can be decontaminated with soap, water and a long-handled brush. The most livestock as well as equipment.

Contaminated feeds may be too "hot" to work. Wisconsin's good deep plowing will take care of the problem. Others may require special treatments or periods of grazing before they are safe to work.

Livestock farmers may be able to continue at work, since animals estimate much of the radioactive material they eat. When people will have much better chances of surviving a nuclear attack than their city cousins, but they have the responsibility of providing the food supply from fallout in addition to looking out for themselves.

Figure 5.3

Defense Page

Page Scores

Page 9

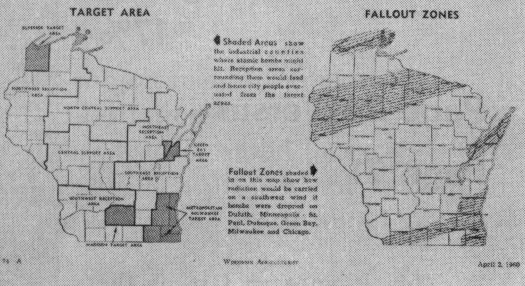
Men 53%

Women 39%

Page 74

Men 52%

Women 50%



men who gave the edge to page 74 on the defense article. Some women apparently start reading with the "Home" department, then go on to the back and swing around to the front of the issue again. For this reason, an article just following "Home" may do a little better with women than one in the front of the paper.

Repeated tests of this kind serve to check on the ability of the editor to keep subscribers reading from page 1 to the back cover.

Wisconsin Agriculturist, April 2, 1960

Figure 5.4

Read Most

Men

Page 71

21%

Page 24

17%

Page 24 Versus

Page 71

This is another test of the kind described in Chapter 5. Good Rations ran on page 24 in the A version of the split and on page 71 in the B version. An article on farrowing houses (not shown) was also transposed.

Adding up scores on each article in each position, we get a Read Most score of 31 per cent for men on page 71 and a Read Most of 32 per cent on page 24. In other words, an article would apparently do as well on page 71 as on page 24. This issue had a total of 88 pages.

Wallaces Farmer, January 16, 1960

Good ration can boost milk output

- Good roughage gets most emphasis
- Feed grain according to production
- Balance ration with good protein

TOP PRODUCTION from your dairy herd is limited by two things—the inherited ability of your cows to convert feed into milk, and the quality and quantity of that feed.

This assumes you're already providing good herd management.

There's nothing you can do right now about the inheritance of cows in your milking line. But you can make sure they are given full opportunity to yield a profitable amount of milk.

Look at it this way—it's just as bad to overfeed a poor cow as it is to be stingy with a good producer.

Iowa State extension dairyman Bob Fincham explains "only the feed left over after all other needs are met can be used by the cow to produce milk."

Underfeeding a heavy producer may not immediately show up in lowered production. A cow will temporarily rob her body of food materials to produce milk. But eventually, milk output suffers.

The Iowa State folks suggest, "A few cows adequately fed may be more profitable than any additional number that must be restricted to make feed available for the entire herd."

What are bossy's requirements before the feed she eats can be used for milk production?

- Body maintenance is the big one.

An average Holstein needs 20 pounds of hay (or hay equivalent) daily just to keep herself alive. In fact, from two-thirds to three-fourths of the roughage a cow eats is used for maintenance only.

• The developing fetus is another important user of bossy's ration.

A cow carries a calf during most of her lactation. She has to "share" her ration with this unborn calf before she can use it to produce milk. This support is especially heavy during the later stages of pregnancy when the fetus makes its most rapid growth.

- A third outlet for feed nutrients is for growth.

A heifer, calving at 24 to 26 months of age, should continue to grow for another two years or more. This additional growth is going to be vital for high lifetime production. So be sure your feeding adjusts for it.

Where do you start? Best advice is to feed liberally but not wastefully.

Current prices make good hay your cheapest source of nutri-

ents. So pushing roughage consumption should pay off. And remember, the more roughage a cow eats, the more there is available for milk production.

Fincham suggests, "feed between 20 and 30 pounds of hay or hay equivalent daily (60 to 90 lbs. of corn silage) for each 1,000 pound cow in the herd."

"Feeding three or four times per day, rather than just once, will boost consumption," he adds.

Remember it takes only about 20 pounds of good quality legume hay to satisfy maintenance requirements of a 1,400-pound cow. But to produce 50 pounds of 4 percent milk, requirements jump approximately like this: energy, 3 times as much; protein, 4 times as much; phosphorus, 5 times as much; and calcium, 6 times as much.

Fifty to 60 pounds of hay would meet these demands. But a cow can't eat that much. Her stomach just isn't large enough. (Hay pelleting may soon remove this physical barrier.)

Here's where your home-grown grains and purchased supplements fill the gap.

"Balance your grain mixture according to the quality of the roughage you feed," advises Fincham. "Then, feed this grain according to the production of each cow."

For example, with good quality roughage, a cow producing 35 pounds of 4 percent milk needs about 8 pounds of concentrate feed. Feeding medium quality hay boosts this amount to 11 pounds.

Many dairymen use this rule of thumb: Good quality hay, 1 lb. grain per 4 lbs. milk produced; medium quality hay, 1 lb. grain per 3 lbs. milk; poor quality hay, 1 lb. grain per 2½ lbs. milk.

How about protein? With top quality hay, fed liberally, addition of your grain alone will make a balanced ration. Don't over rate your hay, tho—only leafy, sun-cured, legume forage rates top quality.

If hay is medium or low quality, you should add some protein concentrate to the grain. A 14 to 16 percent digestible protein ration is suggested for these roughages.

Vitamins and minerals are important, too. Be certain your cows are getting enough by supplementing your grain mix. And always have plenty of fresh water available.

FARMER

(A)

January 16, 1960