

NOTES FROM THE WORKSHOP ON AG AND CONSERVATION AT BAAP

January 25, 2001

Dairy Forage Research Center, Prairie du Sac, WI

Notes taken by Jason Van Driesche

NOTE: Direct quotes are printed in *italics*.

PAUL DIETMANN

Introduced goals for the day:

1. Discuss how agriculture and conservation can work together at BAAP
2. Highlight examples of public/private partnerships in conservation/agriculture
3. Make recommendations for BRC Feb 6 mtg

PAUL JOHNSON

Leopold's work in Coon Valley was about how to live on land w/o destroying it. Project was not just soil conservation, but a wide range of disciplines. Highlighted "bull sessions" where people of different disciplines worked together. *You gave the world that model.* People working together for land. And that's what happening here right now.

Do you do it by saying, "This ought to be a park," and taking all the people out? Or do you do it by working the land well? People need to stretch themselves – too easy to crawl back into your box. This is the "cradle of conservation" – need to take the next step.

MARK POWELL (Dairy Forage)

Focus of research related to accountability of farming to env concerns – esp. in land-based dairy operations (ones that produce their own feed). Transformation of last generation has been away from low-impact land-based model towards intensive high-impact industrial model. Transformation of new generation relates to env issues.

Basic issue is phosphorous – this is limiting factor. New legislation focuses on P content of manure. This requires *a whole different way of managing manure*. Many producers increasing herd size w/o increasing land base in order to stay viable. But this requires importation of nutrients, often to the point where land base can no longer absorb wastes.

Work focuses on "front end" of animal – tuning feeding so as to minimize nutrient input w/o compromising production. Have found that can reduce P by 20% in diet, which decreases P in waste by 30%. Half of dairy farms in WI are feeding excess P (3.9g/kg and up). Developing a "P risk index" based on P soil test level, slope, proximity to water, etc. as method of tracking impacts and determining where/when to spread manure.

Research shows that farmers can feed up to 3.8g/kg P and spread manure indefinitely, but 4.8g/kg can only be done 11 yrs before system is overloaded, and 5.5g/kg only 6 yrs.

KEVIN McSWEENEY (UW-Madison)

Three major points:

1. Grid (section survey) system frustrates design of ecological agriculture systems – soil varies w/in a rectangular field. Even in flatter landscapes, have to understand variation in land. Badger is a rare opportunity to *take a bird's eye view of the whole landscape*, allowing a much more sustainable system to be developed. (However, it is possible to do this even on a single farm by setting field boundaries along lines of soil characteristics.)
Low-productivity areas in a field are often related to subsoil characteristics – i.e., thin loess over sandy loam. These areas are also often areas of significant “leakage” of nutrients, etc. Referred to as “hot spots” in the landscape.
Question is, *How can we better fit agriculture into the landscape?*
2. In the long term, we need to be working towards permanent cover agriculture thru cover crops, reduced till, etc. This should be top research priority. Over the years, soil moves from higher places to lower places. This makes higher places lose fertility. *We need to do a much better job of keeping soil in place.*
3. Need to focus on optimizing fertilizer applications. One option is fertilizer insurance programs to keep fertilization levels at optimum. Some practices – such as buffer strips – may in absence of reduced fertilizer use – *may be creating env time bombs*. Climate changes (esp. changes in rainfall intensity) could wipe out buffers and send trapped nutrients into system. Need a whole landscape approach to nutrient mgmt. Also need to investigate “mining” P out of high-nutrient areas and transferring it to low-nutrient areas.

FRED MADISON (UW-Madison “soil sociologist”)

Focus on sustainability of the rural landscape as a whole. *Sustainable has to do with people*. Nobody is paying much attention to this fact. *If we're going to farm this way, we have to make sure we can make a living farming this way.*

Interested in the “hole in the doughnut” area in Badger – fascinating area to investigate integrating agriculture production with landscape conservation. Also interested in possibility of a sort of farming insurance – farmers follow recommendations, and they get insurance to cover any loss in yield.

JOHN HALL (Michael Fields Institute)

MFI is small organization – works mostly through collaborative arrangements. Intrigued by opportunities at Badger. Need more agroecological research centers – this is what Badger could do. Key terms: “multifunctional agriculture” and “working landscapes.” The trick, though, is to figure out who pays.

Rotation system of corn-soybeans-winter wheat/other cover crops most economically viable approach when costs of inputs are taken into account. Have data on inputs/outputs for each of a variety of systems. Designed to cut down on purchased inputs. Very competitive with simpler rotations, mainly because of “systems synergies.”

JOE VAN BERKEL (Sauk Co. Land and Water Conservation)

Why is Badger ideal for this kind of research? *Location, location, location.* Thirty miles from one of great land grant universities in country, presence of DFRC, large acreage in Badger itself. But most important reason is Sauk County itself – unique conservation history and ethic.

Slideshow – first of Leopold and shack. Land conservation departments come directly from Leopold’s work. Slide of soil erosion field day in 1945 – BIG crowd. Lots of pictures of farmers working together in soil conservation assns. – demonstration days, social events.

Also much activity in protecting Baraboo Bluffs – slides of Doc Kindschi, Harold Kruse, Ken Lange. Slide of a former Baraboo biology teacher who helped carry on the tradition. PL 566 passed in 1960s – called for mgmt of uplands for flood control. Slide of farmers and others gathered for dedication of reservoir.

Reduced till/no-till introduced – adopted quickly. Slide of farmer who cost-shared for new practice for just 3 years in 1980s, then started doing it himself. Real conservation ethic here. There have been only 2 district conservationists in 45 years.

County board has done a lot – passed agriculture preservation program in 1978, exclusive agriculture zoning in 1986. \$240,000 in county funds for conservation practices since 1985.

ICF a major part of conservation history as well. Slide of Archibald and Sauey as young men. Have done more than just preserve cranes – aware of need to work with rural people.

Lots of “state conservation farmers of the year” in Sauk County – 3 in 9 years. Grazer meetings every month – talk is as much about protecting the resource as about increasing production.

2000 county budget has \$200,000 for purchasing agriculture development rights.

Instituted Conservation Credit Program in 1999 with tax credits for conservation planning. *It rewards the farmers who have always been doing the right thing.* Many people use conservation credit \$\$ to apply conservation practices that they couldn’t afford to do otherwise.

Farmers in ALNWR alternatives group came together for wildlife habitat – indicated they wanted to take part in research on wildlife/agriculture relationship.

96% of citizens in county want natural areas protection, 94% want agriculture land protection.

We can convert the Badger Plant from our national military strength to our other national strength – agriculture.

FARMERS’ PANEL

Dick Ryan (cattleman, leases pasture in BAAP)

Marcia Colby (dairy farmer, lives/farms across Route 12 from BAAP)

Herb Yanke (farmer, farms land in BAAP)

Dan Ziegler (dairy farmer)

DR – representing grazers (seven total) who lease land at BAAP. All are long term leaseholders. Most grazing on plant by beef animals. Has been cooperating with a project to measure nutrient levels in manure – much lower than for dairy animals. (Therefore, nutrient management is not a problem.) All seven leaseholders are full-time family farmers. Sustainability has to mean this, too – that they can make a living at it. One pasture at Badger has been in pasture for 50+ years – very diverse, low weeds, some native species. Almost no herbicides or fertilizers used. High bird populations as well. Don't do rotational grazing because of restrictions on fencing. But this can now begin to change with decommissioning of plant.

Not against demo plots – but much of what demo plots would do has already been incorporated into leases. *I don't think it's going to take a whole lot more to do sustainable agriculture.* Lands should be used for agriculture (at least until plan calls for something else), and should be coordinated under conservation management.

There is no better teacher for a farmer-producer than another farmer-producer.

Example of grazing networks – 25 or 30 farmers listening to each other. Farmer-to-farmer education.

MC – Everything the experts talk about is what Marcia and husband Tim have been doing on their farm. Didn't want to be labeled a “conservationist” at first -- thought they were all tree huggers. But has gotten to know a lot of conservationists, and *you can sit down and talk to them.* Agrees about modeling good farming for each other.

HY – Farms 60 acres at Badger – quite varied. Used to be that contract said you had to put X amount of fertilizer on – now it's a lot more flexible. Constantly tries out new things – low till, etc. *These new practices are better for the land.* It's also a lot less work.

His 3-1/2 year old daughter wants to farm – got him thinking about how the land will be in 100 years.

Research could focus on how to deal with manure.

Hard part is figuring out what to do with infrastructure. Cant chisel it in stone now. Need flexibility to figure things out along the way.

DZ – *It's all about manure.* How to incorporate manure into a no-till system?

Also – can't paint farmers as the bad guys – have to recognize the fact that they work really hard.

QUESTIONS FROM AUDIENCE AND GENERAL DISCUSSION

Note: “?” – “” before a comment means the speaker is unidentified.

? – How long to clean up the place? How many roads need to be taken out?

DR – Timeline is a big question. Depends on funds.

? – How many roads would you take out from an agriculture perspective?

DR – Don't really need to take out roads for pasturage. Don't need to take out buildings either. It's great pasture already, simply because it's been in pasture for 50 years.

? – Need room for basic research as well – are farmers a part of that?

DR – Key is not to cancel research, but to involve farmers in research. Need some sort of source of \$ to fund farmer participation in research.

MC – Insurance would work here – some sort of “experimentation insurance.”

? – What about grazing as a component of prairie restoration?

DR – *There is the knowledge in this room right now to make that kind of thing work.*

HY – It all comes down to profit – if native grasses are profitable, people will do it. You have to be willing to adjust.

? – Most farmers just want to do the right thing.

Jeb Barzen – Warm season grasses very useful for grazing – but developing a good prairie takes time, just like a good pasture. Can’t do just the things that are immediately profitable. Badger is a great place to get this going.

DR – Look at the landscape as a whole, and find ways to subsidize/insure high-risk activities (or at least those that are long-term investments). This is what an advisory panel would be for – to push this kind of activity.

? – Need research on things that we don’t even have methodology for yet – like how to research the “rotational effect.”

? – Is there any objection to DFRC’s request?

MC – BRC is looking at entire acreage – however, DFRC is likely to get their request.

Rick Walgenbach – Outlined DFRC request on map – DFRC wants to be a part of the larger plan regardless of ownership patterns.

? – BAAP agriculture lands are probably now being used to their fullest capacity – would be a shame to change that.

? – Key is to incorporate grassland bird habitat with farming – real opportunity here. Rotational grazing in warm-season grasses, native prairie, habitat improvement, prairie seed harvests, oak savanna restoration – use cattle, stream buffers, forestry.

DR – All of this is happening already – just need to do more and do it better.

Gene Robkin – Don’t forget that this is a very long term process -- most current uses will continue. Got to think outside the box, but remember that “the box” is constantly moving.

DR – Need to tell BRC that BAAP needs governing board with agriculture responsibility.

MC – BRC’s value #6 relates to this.

? – How specific do we want to be with regard to agriculture use?

Gene Robkin – Want ideas, not specific boundaries. [Bill Wenzel agreed.]

Curt Meine – When thinking about recommendations, *Step outside your role as a researcher and as a farmer, and think about Badger as a citizen of Sauk County.* Also need to think about how to continue these conversations on how to integrate conservation and agriculture.

Mike Putnam – There are a lot of ways that conservation could be made to pay for farmers: charge for recreation access, lease research rights, look into economically valuable native species.

Dave Tremble – Ideas brought up today are elements of a reuse plan – this is just what is needed at February 6 meeting.

DR – Farmers have been having meetings about Badger for 3 or 4 years – and this is the first one that has been entirely cordial. Quit going to meetings about a year ago – too many personal attacks. *There is a whole different feeling of optimism. There is already agreement as to how it could work.*

Brian Kindschi – Biggest issue is who is going to own Badger. Next few BRC meetings are going to be really interesting.

? – This is a great coalition. Our proposals are going to carry a lot of weight.

? – Never been to a BRC meeting. How often do they meet? Who's on the committee? How do I get involved?

Brian Kindschi – *The only way we're ever going to see anything come out of this is to work together.*

PAUL JOHNSON'S CLOSING REMARKS

It's really something how far we've come in the last 10 or 15 years in people's ability to talk with one another. Our challenge is to escape the grid – both on the land and in our disciplines. It's a challenge, but it's an exciting one. Another challenge is to learn how to build the land instead of wearing it down. Central theme is one of integration.

Agriculture doesn't have visitor centers like parks and forests do – but it needs them. We need someone to tell the story – this could be the first agriculture visitor center in the world. The landscape is our visitor center, but people don't know how to read what they're seeing. If Kohl and Feingold want to do it, they'll find the \$15 million you need to get started.

We're never going to get Americans to understand their land until they understand agricultural land.

Have to watch out for incompatible uses – keep out industry! *I think it's worth a real fight, and I hope you figure out how to do it. USDA could be overarching organization via NRCS and/or ARS. I'm out of line in saying it, but it's a great idea. Could make calls to shake something loose.*

Above all, you have to stick together.

FINAL COMMENTS

Bill Wenzel – *There is a demand for conservation, and if agriculture can fill that demand, you'll get the credit for it. Community is really coming together over this issue – first time it's really come together since WWII.*

John Exo – Is there anyone who objects to creating a summary and sending it out? [No.] Is there anyone who objects to forwarding the summary to the reuse committee with names of all participants attached? Not as a consensus, but just as a collection of ideas. [No.] Does anyone want to do more meetings? [Yes.]