



## 2012 Drought Questions and Answers

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### Technical Questions

1: Are you seeing any differences in drought response to fields that may have had cover crops in them for a year or two?

2012 had the mildest winter and warmest spring on record. Most cover crops broke dormancy 2-3 weeks early and many that weren't supposed to survive the winter did. Timing the termination of the cover crops was a roll of the dice at best. Those that rolled the "kill early" dice, ahead of corn, may have won a bigger prize this year.

Scavenging nutrients is a great use of cover crops. They are supposed to tie up nutrients and keep them from leaching away. This spring, and now summer, with little (or no) moisture, the nutrients are still in the dead, but not decomposing plant tissue, and are not being released. The longer the cover crop was let grow, the more pronounced this is.

Cover Crops will use and transpire moisture in the spring. This is usually a good thing in a normally wet Indiana Spring. This year, many cover crops were terminated after the last rain fell, leaving the soil very dry. Most years the cover crop helps conserve moisture from late spring rains to help crops through the more normal dryer summer. The Soybean Crop and some corn may still receive that benefit.

2: How much of the Nitrogen applied this spring will still be present in the soil after the poor corn crop? Will any be available next year?

The short answer is much. A better estimate depends on when it was applied, when the corn was planted and how much rain came after both. Many farmers follow sound management by applying "side dress" nitrogen after corn emergence, however this year they may be paying a greater penalty. Drought conditions may have a significant effect on corn utilization of Nitrogen. It would be great, but roots have little capability to go searching through dry soil for nutrients or water. Nitrogen either moves to the roots in solution as nitrate or roots grow through moist soil to intercept the nitrogen. The 2012 conditions reality is that most roots never have accessed the applied nutrients. Additionally, the nutrients that are normally biologically cycled from soil and released to be taken up in solution had no water to form a solution.

3: What should be a strategy to capture or utilize the left over N?

There is consensus among Purdue Scientists and NRCS Agronomists that much of the nitrogen applied to corn will go unused this year. This is precisely the type of year we need a cover crop, to

trap the much larger residual N pool that will be present after a poor (corn) crop. Numerous studies have shown the highest N losses occur after a dry year.

Many crops will be harvested or destroyed early. If we begin to get some moisture, there could be an opportunity to seed a fall forage crop mix such as oats and turnip or brassicas that would utilize the surplus nitrogen and fill a need for forage.

It may also be a year to consider adding a winter small grain to the rotation. Planting wheat or barley will utilize surplus N after corn and provide early summer feed for livestock. Feed for livestock will likely be in short supply, especially by spring.

If 2012 remains dry into the fall, it is very likely that a high percent, applied nitrogen will remain unused. If a cover crop can be established to sequester the nitrogen and shorter than normal stalks are less of a problem, then no-tilling corn back after this year's corn may be a good use of the conserved nitrogen.

4: I haven't used cover crops, but am looking into adding a cover crop into my no-till operation. Currently there are soybeans and corn being rotated. What would be some good options for seeding cover crops in these scenarios? I would greatly appreciate some advice on where to start and if there are any programs that would help to pay for the cost.

First, try to get to one of several cover crop workshops being held across the state this summer and fall. Check with your local Soil and Water Conservation District or Purdue University Extension Office. Then see Q5.

5: What are the strategies for the upcoming cover crop planting season. What strategies, or warnings, you are offering in terms of when, what, or if to plant in the drought stricken areas.

First, determine the top resource concern to be addressed by with the cover crop. After corn there may be a lot of surplus nitrogen left unused that can be captured. After soybeans, winter cover for erosion protection could be the greatest need. Feed and forage may be the primary concern for livestock producers. Nearly every field will have produced less biomass and thus could use the extra growth to replenish the soil organic matter.

Then, check with your crop insurance agent to assure you aren't jeopardizing policy benefits.

Next, determine your risk for herbicide carryover. Many residual herbicides have greater life in the soil when moisture hasn't allowed for plant uptake or aided in microbial degradation.

Visit: <http://www.btny.purdue.edu/WeedScience/2011/CoverCrops11.pdf>

Finally, select your cover crop or mix using the Midwest Cover Crop Tools at <http://mccc.msu.edu/index.htm> , that best fits your crop rotation and desired attributes.

6: What would be some good reasons for seeding cover crops in drought scenarios?

1. Fall Grazing
2. Spring Grazing
3. Haylage

7: Is it safe to plant my cover crops this year since the chemicals may be hanging around the soil?

Here is a link to an article that provides many resources to help answer:

<http://plantcovercrops.com/chemicals-to-watch-out-for-when-planting-cover-crops/>

8: Risk Management Agency (RMA) could possibly have the farmer's disc or mow the standing corn if determined to be a "failed crop". If so this would leave an incredible amount of residue and could be an issue for seeding cover crops. If this happens to you have any words of wisdom as far as getting the cover crops good seed to soil contact?

It is my understanding that disking, or inversion tillage isn't required. I've been recommending they used a vertical tillage tool (instead of a disk) to both knock the taller corn down and then seed the cover crop. Soybean and shorter corn may only need a no-till drill or narrow row planter to establish the cover crop. Mowing ahead of the planting operation will put a lot of residue on the surface and make it more difficult to cut through with disc openers.

9: What are the Risk Management Agency guidelines for planting a cover crop after a failed crop?

[http://www.rma.usda.gov/fields/il\\_rso/2012/drought720.pdf](http://www.rma.usda.gov/fields/il_rso/2012/drought720.pdf)

<http://www.ca.uky.edu/cmsspubsclass/files/cgwalters/Walters%20Drought%20and%20Insurance%2086-29-12%29.pdf>

10: Why is my corn so yellow?

<http://www.agry.purdue.edu/ext/corn/cafe/drought/rowcrops.html#Fertility>

11: With the short fall we expect in corn yields this fall should we consider planting Barley after corn?

Yes.

- 1) provide a feed grain early next summer to ration available corn
- 2) tie up residual N from this year's corn
- 3) increase potential to double crop beans

12: Do you have any info on barley production, specifically following corn and no till planting.

<http://www.purdue.edu/newsroom/outreach/2012/120724JohnsonForage.html>

13: I'm short on feed. What can I plant to feed my livestock?

Here is a link to an article that provides many resources to help answer:

<http://www.purdue.edu/newsroom/outreach/2012/120724JohnsonForage.html>

<http://plantcovercrops.com/cover-crops-for-fall-and-winter-grazing/>

14: We heard a concern about excess nitrogen in corn silage this year. Can you direct me to the right source?

<http://www.agry.purdue.edu/ext/corn/caf/drought/forages.html#Nitrate>

15: Why can I find every new drain tile because the corn is MUCH taller in those areas where the soil has been disturbed?... Are roots able to reach deeper for moisture ?

It is quite possible, that the untilled/untilled portion of the field had suppressed early root growth. This has to do with soil resistance to root penetration being much higher in the top 6-8" of no-till fields this year following a wet fall and a warm winter with almost no freeze-thaw loosening.

16: Is there any indication about the availability/supply of cover crop seed, especially for forage?

Indications are it is in tight supply.

17: There is a concern about using cover crop for forage due to residual pesticides entering the food stream.

It is critical to check the labels of pesticides applied.

18: Wells are drying up, what resources are available?

The best contact is DNR Division of Water Director Mark Basch at [mbasch@dnr.in.gov](mailto:mbasch@dnr.in.gov) or 317-232-0154.

### **Program Related Questions**

1. Is there any guidance from Risk Management Agency on handling standing corn after it is released as a failed crop by RMA? There is concern that you may have to disk a crop to destroy it.

Risk Management Agency's 'Crop Insurance During a Drought' fact sheet

(<http://www.in.nrcs.usda.gov/2012%20Drought%20Fact%20Sheet%20Springfield.pdf> ) states:

Once appraised, the crop can be released by the company to be: 1. Destroyed - through tillage, shredding or chemical means; *or* 2. Used as silage or feed - See FAQ below.

RMA clarified that discing is not required to destroy a crop. Other options include pasture, bush hog, set for silage, etc. If there are no ears you can leave the forage standing. Destroy does not mean it has to be tilled.

## 2. Will Farm Service Agency (FSA) allow other practices to be released for haying and grazing, such as CP21 filter strips?

There have been no announcements that CP21 will be included as an eligible practice for emergency haying and grazing. National policy prohibits haying and grazing of any practice within 120' of a stream or water body – so this even affects some practices in the eligible list. For example a CP2 for CREP along a stream cannot be hayed/grazed or the portion of a CP8A that is within 120' must be excluded from the haying/grazing plan.

## 3. If EQIP practices fail due to the drought, will assistance be provided under the existing contract or under a new EQIP contract?

NRCS has a cost-overrun account that can be used to provide assistance for replacing failed practices under existing contracts, as long as the contract has not expired (this is done through a contract modification which adds dollars to the contract). If a contract has expired, new funds will be used to provide assistance to replace the failed practice.

## 4. Under FSA ECP, can we utilize watering practices on CRP land?

No, you cannot put watering practices on CRP land. You can, however, use temporary watering adjacent to CRP land.

## 5. Is Cover Crop a primary practice for the special WHIP Drought Sign Up?

No, but it is a practice you can sign up for on its own.

## 6. Will FSA extend the CRP deadlines due to the drought workload?

FSA has two deadlines that may impede any additional changes to deadlines for conservation planning for CRP. First, FSA will have a period of time between September 14-October 1 when software will be unavailable. So if CPO's are not ready by the new deadline of August 24<sup>th</sup>; it gives a very limited time to get all required signatures on contracts and get the application process completed. Second; September 30<sup>th</sup> is when re-enrollments expire and if CPO's are not completed and CRP-1's expire producers will lose payments and in some cases the acreage will lose its CRP eligibility status.

The deadline of August 24<sup>th</sup> was agreed upon at the national office between FSA and NRCS. Both FSA and NRCS need to monitor SU43, and re-enrolled offers to ensure USDA does not cause loss of benefits or eligibility. New continuous CRP offers are valid for a period of six months after submission so if there is a prioritization option some of these could be placed at the end of the workload, but obviously we must make sure we provide the best possible customer service.

## 7. Can practice standard 340 Cover Crop be hayed or grazed?

The national standard allows haying or grazing with no restriction. While it is not the primary purpose of the practice, it is not restricted. In new contracts 512 may be a better option for forage,

and has better seeding rates. NRCS is planning to release guidance clarifying that 340 Cover Crop can be hayed or grazed.

8. Can EQIP applications/contracts be rolled into WHIP?

No, they are two separate programs. Rules, policy, ranking and funding are separate for these two programs.

9. Will the process for the special drought WHIP sign up be the same as regular WHIP?

There will be special guidance issued for the sign up that will limit eligibility and practices.

10. Can we use ECP dollars and practices on land enrolled in CRP?

1-ECP, paragraph 115 provides guidance for lands enrolled in other cost share programs. Specifically acreage where participants have or will receive funding on the same acreage under CRP is ineligible for cost share assistance under ECP.