

Sustainable Agricultural Land Tenure and Risk Management for Extreme Climatic Events

Summaries of interviews from SALT Initiative III (Grant P2013-05)

Leopold Center for Sustainable Agriculture 2013-2014

1. Farmer, Beginning Farmer, corn and soybeans

Total Acres: 6,000 (over 5000 acres rented from 10 landowners), farming with his parents

Farming for: 4 years

Attitudes: A lot of chaotic weather, which is going to continue for at least the next 10 or 20 years.

Lease arrangements: Combination of oral and written. Cash rent and crop share. Leases have changed more because of markets than because of weather. Conservation practices are included in a couple of leases.

Crop insurance: Carry enough coverage to protect against large losses. Little communication with landowners about crop insurance.

Examples of extreme weather: Recently experienced drought, flooding, heavy rains, and extreme temperatures.

Strategies: Discusses impacts of the weather with all of the landlords. It's better when landowners want to stay involved and know what is going on. Most of his landowners are retired farmers. Implementing cover crops to deal with nutrients, erosion control, and soil health. Started doing cover crops on their own land and small targeted areas of rented land. Scaling up cover crops which helps their landowners anticipate implementing them. On crop share ground it's a larger conversation. He is sometimes willing to shoulder costs himself if landowner isn't willing to invest in cover crops. Has over 100 terraces on the ground he farms. Willing to share yields, soil tests, etc. with landowners if they ask.

Responsibilities for weather adaptation: Both operators and landowners are responsible, but he takes more responsibility. Communication is important between landlord and tenant to keep everyone informed. Identifies he is taking a high level of responsibility for conversation. He is leading more than the landowners are pushing for increased conservation is response to extreme weather.

2. Landowner, Retired Farmer, corn, soybeans, and hay

Total Acres: 1,856

Farming for: 50 years

Attitudes: Wide variability in weather and no two years are alike in anyway. More water is running down the river because of increased rain, but also there's no time for the rain to soak into the ground because there is a lot less grass. There needs to be more grass and a greater ethic for stewardship.

Lease arrangements: Written, cash rent. Requires rotations (up to six years on hay ground) and reports for yields, soil tests, and inputs.

Crop insurance: Tenant has crop insurance but he doesn't know anything about their level of coverage. Didn't use it when he farmed. Knows very little about it now.

Examples of extreme weather: Drought and heavy rains had very little impact on his farm because of the conservation he keeps in place, but many effects on the farms boarding his land.

Strategies: Not too many things will encourage more stewardship if the farmer doesn't want to take care of it. No combination of lease provisions will change a farmer's perspective on farming. If the farmer won't comply with the conservation demands of the landowner, then the landowner needs a different farmer. But the owner has to put the provisions in the lease to hold the farmer accountable. In their case they specify soil tests, rotations, yields, conservation structures (waterways, ponds, grass strips), inputs (required tenant to apply more lime), and contour farming,

Responsibilities for weather adaptation: Landowners. Too many landlords are too far removed to understand the management and how it relates to extreme weather. NRCS standards are not enough to protect the land. If a farmer won't follow the conservation provisions in the lease, then the landowner needs to find a new farmer. The best situation is the owner/operator but that's becoming rare.

3. Landowner, Retired Farmer, corn and soybeans, pasture

Total Acres: 460

Farming for: 62 years

Attitudes: More diverse, negative weather. People play a role in creating the changing weather especially the use of fossil fuels. Concerned the extreme weather is going to continue.

Lease arrangements: Written, cash rent

Crop insurance: Tenant has it but he doesn't know anything about it.

Examples of extreme weather: Drought, flooding, and heavy rains. Drought caused significantly lower yields. Ponds have dried up.

Strategies: Changing farming methods depending on the changing weather conditions, encourages minimum till, or no till if possible. Also has adjusted rent because of weather related losses. Adjustable rents, long-term vision.

Responsibilities for weather adaptation: Communication is key, as the landowner, he advocates for communication and the transfer of information from the tenant to the landowner. He admits that he's gotten lazy in this respect. Does not require communication in the lease. Trusts his farmer to take care of his land. He decides what will be farmed. 300 acres of pasture: "it's erosion prone and it just should never be farmed, so at least while I'm around it won't be farmed."

4. Farmer, corn and soybeans

Total Acres: 2000 (1500 rented from about a dozen landowners)

Farming for: 36 years

Attitudes: Slightly more concerned with the weather pattern but not significantly. Just a weather pattern that will swing around the other way eventually. "I don't know if it's really any worse or if we just have more information to show the extremes."

Lease arrangements: cash rent, written, multiple year

Crop insurance: Has it. Doesn't worry so much about weather because he has crop insurance.

Examples of extreme weather: Flooding and high winds/lodging.

Strategies: Clearing waterways as needed. Informs the landowner as needed about conservation maintenance and repair. Will ask before removing trees to make sure there's no sentimental value. Trees and stuff on the fence line indicate poor stewardship to him. Would like to see

some “flex” in the lease to mirror the swings in prices. Skeptical of sharing yields and inputs with the landowner. “It’s counterproductive. The better I do the more they want.”

Responsibilities for weather adoption: Farmer takes on the responsibility and the risk. Offers to maintain conservation while rent is reasonable. Nothing mandates him to do so. Landowners are more interested in rent than conservation.

5. Farmer, corn and soybeans conventional; seed corn contract; oats, hay, corn, beans organic
Total Acres: 320 acres rented—didn’t talk about how many owned acres farmed

Farming for: 31 years

Attitudes: Concerned that climate change is happening and will continue to get worse. Concerned we’re entering a normal 35 year cycle of less stable weather coupled with climate change. “It’s gonna get really wild I think.”

Lease arrangements: Written, flex cash rent.

Crop insurance: Yes. Shares 1/3 premium, 1/3 payment with landowner. Concerned crop insurance is covering up management decisions and allowing large operations to get larger.

Examples of extreme weather: Flood, drought, heavy spring rains.

Strategies: 4-year crop rotation is a buffer against bad weather on organic fields. Diversity spreads risks. Weeds can be really bad on organic with a wet spring. Easier to control weeds on conventional acres. Putting worst acres in CRP.

Responsibilities for weather adaptation: Farmers need to be held to a higher level of responsibility. Landowners need become more engaged.

6. Farmer, corn and soybeans, small grains, and saving seed from cover crops.

Total Acres: 400 acres (160 rented from two landowners)

Farming for: 30+ years

Attitudes: This particular weather pattern will most likely hold for another few years. Similar rainfalls but it comes in heavier storms often violent rain events, not spread out. Calls himself a “shrimp hugger” as he empathizes with Gulf of Mexico shrimp fisherman and tries to hold soil and nutrients on his farm.

Lease arrangements: written, cash rent and verbal crop share

Crop insurance: Carries insurance. Doesn’t share that information with the cash rent land owner. Crop insurance can encourage putting marginal land into row crop production, especially in other states like North Dakota.

Examples of extreme weather: Lower yields due to drought. Multiple years of too hot, too dry, and too wet.

Strategies: Uses cover crops extensively and advocates for them. Focused on improving soil quality as protection against drought.

Responsibilities for weather adaptation: Farmers. Longer-term leases will allow farmers to have confidence to invest in their practice. Short term leases push farmers to take chances on the land. He sees increases in terraces, work on waterways and buffer strips, and more tiling. His crop share landowner completely differs to him for weather adaptation such as using cover crops. “My motto is I’m gonna treat ‘em like I’d treat my own ground and this year every single one of the rented acres whether 50/50 or the cash rent, all of the acres received cover crops this fall.”

7. Landowner, corn and soybeans, pasture

Total Acres: 190

Farming for: 4 years (heir to the farm and had a farm with husband for 25 years)

Attitudes: Would like to have a “normal” year. Struggled with extreme weather every year. Can’t do much about the weather. Not sure if it’s global warming.

Lease arrangements: Oral, crop share but considering going to cash rent.

Crop insurance: Participates but farmer takes care of decision making and walks her through it. She’s received a crop insurance payment the last two years.

Examples of extreme weather: Bad hail, drought, heavy rains causing erosion.

Strategies: Hasn’t talked to the tenant about changing farming practices in relation to changing weather events. Has noticed that her cousin across the road is doing a lot of tiling. Trying to decide whether to go to cash rent or even sell. Leaves the production and land management decisions to the farmer.

Responsibilities for weather adaptation: Combination of landowner and tenant but she trusts her farmer to make the majority of the management decisions.

8. Landowner, corn and soybean on 30 acres, prairie on 20 acres, creek and trees on remaining, urban edge

Total Acres: 76 acres

Farming for: 59 years

Attitudes: Doesn’t expect the rain to come as it used to. It comes in a flood or it doesn’t come and there’s a drought. Attributes the problems to climate change. Frustrated with her tenant. Has ideas for her farm but hasn’t been able to communicate well with the farmer, “he puts his crops in and that’s it, we never talk.” Frustrated with urban runoff onto her farm due to heavy rains.

Lease arrangements: Cash rent, written. Interested in crop share. Would like a new tenant. Current tenant farming for 4 years.

Crop insurance: Thinks crop insurance might affect decisions a farmer makes. Doesn’t know anything about her tenant’s crop insurance coverage.

Examples of extreme weather: Has had drought, intense rains, floods, extreme temperatures, and tornados.

Strategies: Deep desire for good conservation. Has put in prairie and thousands of trees on land she manages. Frustrated with her tenant doing corn on corn on the 30 tillable acres but she has not engaged him about this.

Responsibilities for weather adaptation: Both are responsible for managing the land, but they are not cooperating. Land owner has a much higher standard for conversation than the tenant.

9. Landowner, county conservation board, management by park ranger

Total Acres: 85 focused on working with a beginning farmer, two crop rotation now (corn and soybeans), will move to a three crop rotation in next lease agreement. Require cover crops.

Farming for: park ranger for 16 years and has management farm ground for park during that time.

Attitudes: People are not changing their leases to respond to weather events. Farmers can easily be interested in the short-term. He manages the farm ground to be as resilient as possible to hold soil in place and improve it, to keep water on the farm instead of sending it down stream to cause problems for other people, and have pulled vulnerable land out of corn and soybean production and managed it for forage production.

Lease arrangements: 2-year lease agreement with the county, cash rent, requires reports on soil tests and yields. Has a 5 year lease on another farm for alfalfa and transitioning all of this farm out of agriculture in the coming years. That acreage not included in the total.

Crop insurance: Manager doesn't know anything about crop insurance. Hears in the media that crop insurance encourages fragile land to be put into corn and soybean production but can't speak to whether that is true.

Examples of extreme weather: He could see the soil loss in the spring from heavy rains in the past when it was just corn. More resilient to extreme weather now. Experienced droughts and continues to experience heavy rains.

Strategies: Crop rotation. Diversification leading to a different soil structure will help build the soil, keep water on the farm, and reduce erosion. Using cover crops. Not farming marginal ground and using it for native species reconstruction projects.

Responsibilities for weather adaptation: Land owner (manager) is taking responsibility. Working with the farmer by sharing costs but the land owner is requiring robust conservation from the farmer. Bored the tenant with his perspective on conservation and resilience as a strategy for dealing with climate change, but also takes time to listen to the farmer's perspective.

10. Landowner, Farm Manager

Total Acres: 20,000 managed within company

Farming for: 20 years

Attitudes: Getting extreme rain events every year. A farmer might not be able to do anything about the rain, but that doesn't mean he or she can't do something about the soil. Cover crops are a good idea but it might not ever have a big impact. It's too messy and time consuming for many farmers. Needs to be more hay ground to combat extreme weather but it's a hard sell to both landowners and farmers.

Lease arrangements: 2/3 flex lease and 1/3 cash rent. Haven't increased pasture rent but are requiring more cleanup work and more inputs like lime. Likes flex lease because it relates to the productivity of the farm and not just pulling a number out of the air or what neighbors are saying. Hard to get top bidders to farm fully on the contour. Will do it on the side hills but still run end rows up and down the hills.

Crop insurance: Requires it on the flex leases. Cash rent leases are up to the farmer. Crop insurance does increase the likelihood that marginal land will come into row crop production. It also pushes up the rent on land that's prone to flooding. It's a double edged sword. It can be very helpful and it can also lead to some abuses.

Examples of extreme weather: Speaks mostly about extreme rain events, especially as it relates to soil loss and a decline in productivity. Has seen this dynamic all over the state. More severe in Southern Iowa but it also is happening in Northern Iowa.

Strategies: There needs to be more oversight. Following up on farming practices to make sure the farmer is using the conservation practices is the only way to ensure they are doing what they are claiming.

Responsibilities for weather adaptation: Land owner is ultimately responsible. But if there isn't any monitoring or follow up, then the farmer will likely start cutting corners. Farmers will do cosmetic work to cover up weather related problems and problems from poor conservation. It really requires the land owner to be engaged. That's a big value of a management company: evaluating and enforcing the lease agreements. Land owners should really be concerned about how much of their soil they are losing and what kind of impact that has on the productivity of their farms. But most don't have any way of knowing. There are many problems keeping landowners from being more engaged such as advanced age or inexperience.

11. Landowner, all custom farmed, rents small pasture, hires one farmer

Total Acres: 250

Farming for: 42 years

Attitudes: Can't make changes to the lease based on previous weather events since you can't plan on a drought or other extreme weather events. Rough ground is in pasture or CRP. No farmer likes soil loss so most are managing it the best they can to avoid it. High confidence in seed genetics.

Lease arrangements: Cash rent on pasture, custom rate determined by ISU on the crop ground.

Crop insurance: Carries enough crop insurance to cover expenses. Agrees some farmers might use crop insurance as an incentive to put rougher ground into row crop production. He's got his rougher ground out of row crop production.

Examples of extreme weather: Had flooding and drought in the same year. Prevented planting from extreme rain and then yield drops from drought.

Strategies: Landowner is free to write into the lease provisions since it is their land. Specific farming practices and conservation practices should go in there as the owner wants it.

Responsibilities for weather adaptation: Most farmers are taking care of the ground without being told because the tenant is dismissible every year. Landowner can write it into the lease if he or she thinks the tenant isn't going to take care of the land.

12. Farmer, corn and soybeans, fed cattle—first in his family of a long line of farmers to actually own land.

Total Acres: Over 1600 acres (owns 80 and rents the rest from 7 landlords)

Farming for: 30 years

Attitudes: Doesn't worry about what he can't control—the weather.

Lease arrangements: written crop share, flexible lease, cash rent, and custom farm.

Crop insurance: Last year was the first time his crop insurance ever paid. Carries it to cover risk not as an income generator. Does not see neighboring farms abusing land because of crop insurance. Figures you can find it somewhere if you look hard enough but he doesn't see it.

Examples of extreme weather: Last year affected by flood and drought, yields dropped. Extreme weather keeps things in check to some extent. If it was all good all the time, big farms would just get bigger and bigger. Extreme weather is part of the challenge of agriculture.

Strategies: Makes changes to adapt to the changing weather. Crop share is the best arrangement because it can benefit both parties when the crop is good. With cash rent, landowner might just want their money and can be less concerned with land. Diversifying with livestock is a risk management strategy in the face of extreme weather. Leaves residue on fragile soils. Bales corn

and bean stubble on better ground. Uses a lot of different tillage to combat changing conditions. Wouldn't want a landowner telling him what to do in a lease and taking away any of his tools to manage the land.

Responsibilities for weather adaptation: Mostly the person on the land—the farmer. He always tells landowner what he will be doing. Lots of cash rent bidding for acres. He's never done that, but some landowners are very willing to take the highest bidder. Those farmers are taking a greater risk as is the landowner and that may not mean the best care of the land. "Landlords as a whole verbally care a bunch until it comes time to take less of a check." "Crop share people are thinking more long term, more generational as opposed to is it good for me this year, how much money can I make this year." "Good landlords deserve good tenants and bad landlords deserve bad tenants." Gives less information to the landlords who are only interested in the money. Feels they will use information against him in some way.

13. Landowner, corn and soybeans, a little hay, agri-business (custom spraying, crop insurance)

Total Acres: 100 acres

Farming for: 13 years

Attitudes: People make changes based on the crop prices and not necessarily the extreme weather. More concerned about heavy rains than drought. Structures can't handle 4 inch rains all at once. Everyone is starting to worry about the loss of nutrients because of the moving water.

Lease arrangements: Cash, written—short term as he plans to farm his ground again in the coming years.

Crop insurance: 13 years ago, no one was at 80-85% coverage. Today he doesn't see anyone below 80-85% coverage. People have put pasture into row crop because of prices not crop insurance.

Examples of extreme weather: Lower yields due to the drought and had some water backed up with heavy rains. Everyone was experiencing lower yields, especially on poorer soils.

Strategies: Use waterways and terraces. As land owner, he's responsible for putting those in place. Tenants might push back if landowner didn't make improvements on the land.

Responsibilities for weather adaptation: Landowner is responsible but needs to have good farmers he or she trusts to take care of the land. Landowner has to be fair with the farmer. He knows his tenants and believes they treat his land like their own.

14. Farmer, pasture poultry and starting a multi-species grazing operation

Total Acres: 15 acres—rented from family

Farming for: 1 year

Attitudes: Extreme weather is going to continue, also concerned about the water supply on her land. The extreme weather reinforces her resolve to have a diverse operation. Extreme weather will require more resilient systems. Her diverse pasture, hay, and livestock operation offers a great deal of resiliency.

Lease arrangements: Written, cash rent and caretaker responsibilities

Crop insurance: Family has it on other crop ground but she does not.

Examples of extreme weather: Yield drop on her parent's farm, drought, heavy rains, and high temperatures.

Strategies: Considered conservation practices before getting into farming, wants to be an example for other farmers, participated with NRCS programs—rotational grazing and rehabilitated a wind break.

Responsibilities for weather adaptation: Farmers can be very responsible. Offered example of Greg Judy in MO who built grazing programs on rented land and rebuilt poor soils. Landowners want him to be on their farms.

15. Landowner, Farm Manager

Total Acres: 20,000 managed within company, mostly row crop but a small amount of hay and pasture

Farming for: 1 year

Attitudes: Marginal land should be in CRP or some other program. Ground that was pasture and is now being farmed can take down the whole CSR of the farm. Had some serious drought issues in 2012. Yield losses more on drought, but farmers will bring up weather more with heavy rains and talk about the need to install, fix, or replace tile.

Lease arrangements: Written leases that require full disclosure of all inputs and yields. Mostly cash rent. A few crop share leases.

Crop insurance: Not part of the discussion. Assumes her operators have it. Only in crop share leases does she have the conversation. Can see where crop insurance can be an incentive to tilling up pasture.

Examples of extreme weather: Drought and heavy rains. However her conversations with landowners and farmers is more centered on water quality and soil erosion instead of weather.

Strategies: Use yield maps from combines. She also takes an aerial photo of every farm in late July and early June. Those two together reveal a lot. Older farmers not so willing to share data with managers, younger farmers are proud of the data they can provide and more willing to share. Future will see more talk about cover crops and specifics about how the farm should be maintained. Will enter into longer term leases like 5 years, if farmer is willing to take on more conservation practices. Will lower rent to compensate for farmer costs. Specific example was sharing the cost of tiling. Generally not a hard sell to either the operator or the landowner to take some sensitive areas out of production. Getting more acres into cover crops but questions still remain about who pays the costs. Figuring out the cost share is the biggest hurdle to cover crops on her farms right now.

Responsibilities for weather adaptation: Combination of landowners paying more attention to the conservation on their farm, and younger farmers using conservation as a bargaining chip for lower rent. She tries to avoid renting to larger operators who are “grabbing acres”. They tend not to be good stewards. She sees neglect on new farms in her management. Someone is maybe taking advantage of an elderly land owner and she’ll see neglect regarding stewardship, management, and paying the rent. Seeing investors being more interested in conservation. “We’re hearing a lot about principles of responsible investing.”

16. Landowner, out of state

Total Acres: 200, corn and soybean rotation. Very small amount of pasture.

Farming for: 40 years

Attitudes: Weather hasn't dramatically affected this landowner. A little bit of yield loss to drought, especially on beans. Built conservation into the management and works with the farmer to maintain it. Large waterways used for hay, strips on the hills, no till, contour. Feels conservation has protected his farm from extreme weather.

Lease arrangements: Cash rent, written, long term tenant

Crop insurance: Tenant has it. Everyone's got to have it. Doesn't know much about it. "If anyone can figure that out, they're a genius."

Examples of extreme weather: Drought but it didn't bother the crops other than a little lower yield on the beans. Conservation protected against extreme weather.

Strategies: No-till, high level of trust with the operator, visits the farm on an annual basis. Used to stay for a couple weeks on the farm in a trailer in the summer.

Responsibilities for weather adaptation: He puts in the major conservation and trusts his operator to maintain it and to care for the farm.

17. Farmer, Beginning Farmer, specialty crops (retail agriculture), pigs, hay, tree crops.

Total Acres: 145

Farming for: 3 years

Attitudes: Conversations with the landowner are essential to creating a common goal for the land. Weather is going to continue to be extreme.

Lease arrangements: Long term lease with the option to purchase, written, cash rent

Crop insurance: Doesn't have it himself. His enterprises aren't well covered by insurance programs. Believes crop insurance is playing a role in farmers practicing less stewardship than they should. Abuse of the land is a loss for the landowner, and they probably don't realize it.

Examples of extreme weather: Extreme spring rains followed by drought conditions. Caused some gully erosion. Neighbors are filling in a lot of gullies every year.

Strategies: Put in key-line system to capture and redirect water. Using several NRCS programs including EQIP and conservation innovation grant. Enrolled in Conservation Stewardship Program. Self identifies as a conservation farmer. Very focused on putting high level conservation practices on the farm. He's paying for them, signing the contracts with NRCS. Feels OK about this because of his long term lease and option to buy.

Responsibilities for weather adaptation: In his situation, he is taking on the responsibility and the risk. In general though, he argues it is the landowner that needs to be responsible and should require it in the lease.

18. Farmer, Cow calve and fed cattle, corn and soybeans, pasture and hay

Total Acres: 700 (rents about 200 from two landowners) also makes some CRP hay. Farms with his father.

Farming for: 15 years

Attitudes: Weather has changed, farmers need to adapt to those changes, but it's so extreme there isn't a good plan.

Lease arrangements: Written, cash rent

Crop insurance: Has some insurance on the cattle for flood, lightening, wind, but not for extreme heat or cold. High deductibles. Participating in some USDA disaster programs for livestock. Has crop insurance on row crop acres.

Examples of extreme weather: Lost many cattle due to flash flooding and lightning. Also lost beans and corn due to drought. Landowners say “we’ve never run out of water, it’s never been this dry.” Nothing to graze in November and December. Water is now a serious issue for his operation.

Strategies: Used cover crop, also used terraces but concerned they aren’t high enough. Hauling manure to try and build organic matter in the soil to manage soil moisture. Participating in USDA livestock disaster programs. Keeping cattle out of the ponds to preserve water quality—water on the backside of the dam is higher quality.

Responsibilities for weather adaptation: They are taking responsibility for conservation on the farm. Some landowners tore up a lot of pasture because of high commodity prices.