Marcellus Shale Landowner Coalitions: Form, Function, and Impact

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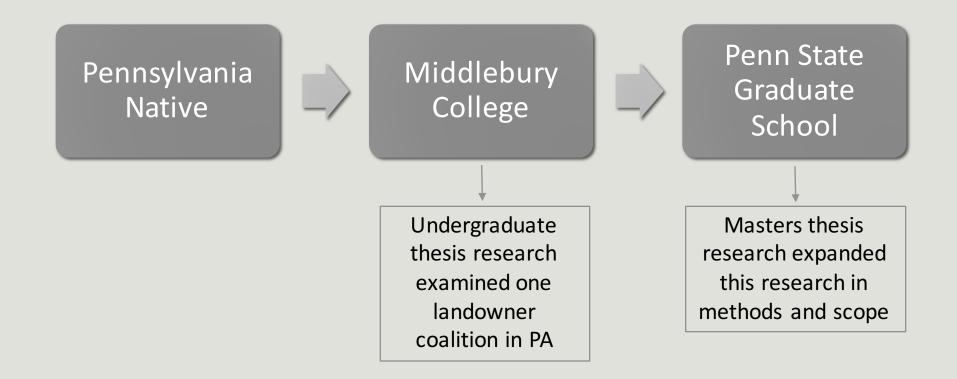
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A bit about me...



Introduction to Landowner Coalitions

Groups of landowners who collectively bargained for better contractual lease terms, and then all sign individual leases with gas companies. Collective process \rightarrow (legally) individual results

Fort Worth, Texas (2006): the first landowner group collectively bargained with multiple companies for a more desirable lease, and eventually signed with the company of choosing in the Barnett Shale formation (Liss 2011).

Their lease and story was shared online \rightarrow evidence to mineral owners that company leases could be negotiated (Liss 2011).

Unique from royalty owners associations

Landowner Coalitions in Marcellus Region

Most prominent in the Marcellus Shale region

Landowners heard of the coalition model through extension educators, neighbors, internet resources

In Pennsylvania alone, over 40 landowner groups have formed to collectively negotiate

- Representing well over 500,000 acres in the commonwealth
- (Marcellus Drilling News 2012)

Vary greatly in size, scope and structure

 Range from a handful of landowners to multi-county or multi-state entities with hundreds of members

Research Objectives

Present a grounded theory of landowner coalitions

- What are landowner coalitions?
- What process(es) did they go through?
- What results were they able to achieve?
- What are the advantages and disadvantages of membership in a landowner coalition?

Produce outreach materials to be disseminated to those facing questions about group negotiations

- Identify evidence-based recommendations of best practices and procedures for future landowner coalitions
- Explore the impact of landowner coalitions on Pennsylvania farmers and farming communities
- Evaluate landowner coalitions' ability to serve as a model of collective action for future land use decisions

Identifying the Research Gap

Research on landowner coalitions

Jacquet & Stedman 2011

- Landowner coalitions in New York's southern tier
- Found that landowners join with intent of increased personal benefit, but increasingly were motivated to help the larger community

Liss 2011

- One landowner coalition in NEPA
- Found that coalitions depend on strong leadership and trust, and work together to change the power differential by changing "asymmetry of information"

Research on farmers leasing

Malin 2013; Malin & DeMaster 2016

- Overlapping study region
- Found farmers face: vulnerability, limited agency in dictating land use near farms, endure corporate bullying, & face procedural inequalities negotiating leases
- Better for larger farmers than small/medium
- Suggest it may be different for farmers in areas where landowner coalitions have formed
- BUT they suggest that this has not happened in Pennsylvania

Identifying the Research Gap

Research on landowner coalitions

Filling the Gap:

This research occurs in Pennsylvania (as opposed to New York) where development did take place and outcomes are more realized; In Pennsylvania the geographic area and number of groups included is increased.

Research on farmers leasing

Filling the Gap:

This research includes farmers in the same region that did participate in landowner groups. Did they have a different leasing experience? Does participation in a landowner group matter?

Study Area



Bradford, Susquehanna, Wyoming, Lackawanna and Wayne counties of Pennsylvania

A few caveats:

- Wayne County does not have active gas development due to a moratorium BUT landowner groups in the county did sign leases so we can examine outcomes of negotiations
- Originally included a comparison with Southwest PA → trouble locating landowner groups;
 context was unique so focused on northeast region only

Study Area



Chosen for combination of three characteristics: high volume of gas development; agricultural production; prevalence of landowner coalitions

While region as a whole represents all three of these categories, particular counties may not.

 Landowner coalitions do not conform to county boundaries → study area has expanded into counties that may not meet one or more of the study region characteristics

Over 3,000 private landowners joined landowner coalitions in Susquehanna, Bradford, Wyoming, Lackawanna and Wayne counties, representing over 200,000 acres (Marcellus Drilling News, 2012).

While landowner groups were most active in the 2008-2010 timeframe, they continue to organize and lease today, with new ideas arising about structure and form

Methods

In-person or phone interviews, recorded and transcribed (November 2016 – August 2017)

Three categories of respondents:

- Key informants: oil and gas attorneys, financial consultants, extension educators, law professors...
- Coalition leadership
- Farmers who participated in coalitions

No list available \rightarrow started from incomplete lists online and asked each person to recommend additional respondents

Methods

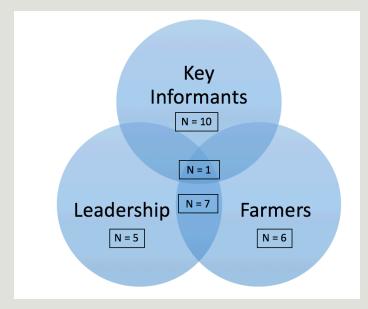
29 interviews conducted with respondents representing over 35 landowner groups*

Ranged from less than 15,000 acres to over 100,000 acres

Addition of 7 interviews with leadership of included coalition from previous project (August – September 2013)

All 36 interviews coded:

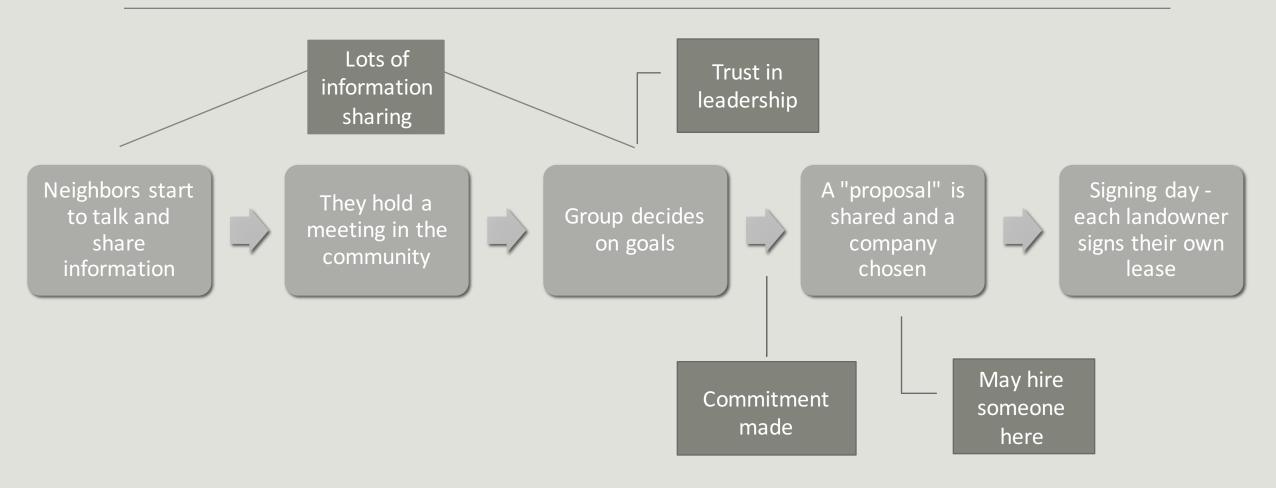
- Reviewed transcripts multiple times looking for emerging themes and answers to research questions
- Organized data according to these themes



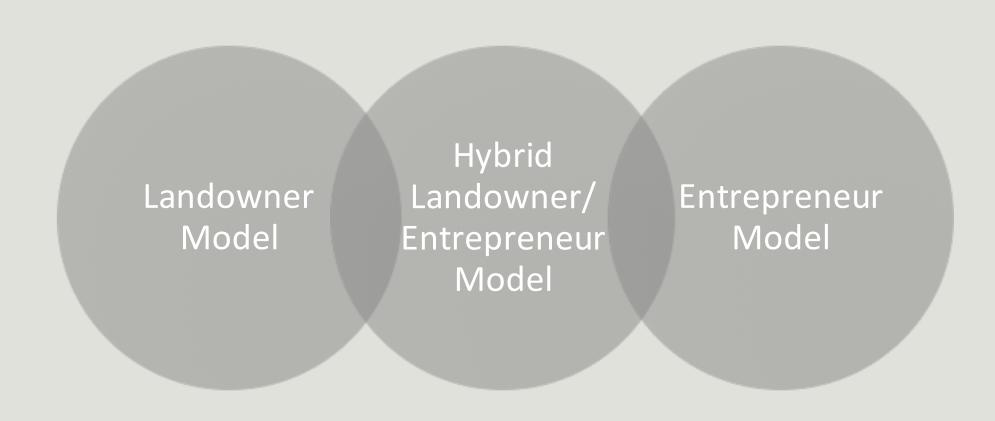
*Categories were not mutually exclusive

Results

Typical Coalition Timeline (~1 Year)



Three main types of landowner groups



Advantages: Lease Terms

Generally received more protective and advantageous lease terms, larger bonus payments, and higher royalty percentages on average than individuals operating within the same context

"I would think that without a doubt, if you look at the average price of gas leases and what people got as an individual versus a coalition, there's no doubt the *coalitions* came out much, much better" (Leadership 3)

"Those guys [coalitions] got *addendum after addendum after addendum*.... Some of the bigger groups got a true no deduction clause, which is big. And then of course they got some *better money and better royalty rates*"

(Key Informant 9 – oil and gas attorney)

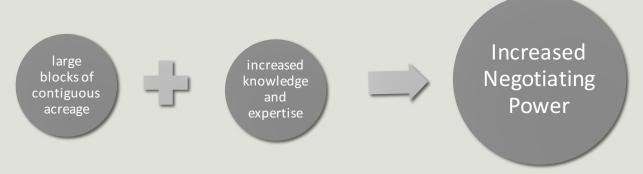
Advantages: Negotiating Power

Members of landowner coalitions were able to procure a better deal largely because they attained greater negotiating power than did *most* individuals

Often company executives would fly in for negotiations or talk with coalition leadership directly

Some groups ended up as the object of bidding wars between multiple companies

One group saw their bonus payment lease terms jump from \$3,500/acre to \$5,500/acre in just hours on the night before signing day



Advantages: Equalizer

Landowner coalitions served as an equalizer both between landowners and natural gas companies, and amongst landowners

Between Landowners and Industry: Respondents saw coalitions as a tool for landowners to receive what they deserve in return for their mineral rights, so that not only companies are profiting.

Amongst Landowners: Negotiated for members to benefit economically who were in moratoria may not end up owning their mineral rights, or without developable resources

"if it is something to benefit from, then we'll all benefit alike. We think that that's a good strategy, a good mission statement" (Farmer 2)

Advantages: Equalizer

Between Small and Large Landowners:

Every coalition included in this study allowed landowners with parcels of any size to be included

In a number of cases, gas companies requested only signing landowners that owned over a certain number of acres. In all of those cases, the landowner coalition insisted that the company must sign all of its members.

Coalitions allowed smaller landowners affordable access to an attorney that might not have been worthwhile if they chose to negotiate on their own

"Somebody with ten acres probably would not have paid \$3,000.00 to an attorney to negotiate their lease because the amounts weren't significant enough to them... They could easily just sign up for this land group and know that they're getting a professionally negotiated lease with a vetted company. It gave them a step up in that battle that they otherwise would not have had" (Key Informant 7)

Advantages: Impact on Community

Respondents described helping their community as both a reason for starting or participating in a landowner coalition, and a goal of the coalition once it was formed.

Donations from natural gas companies: roads, guardrails, 4H, hospitals, fire houses, etc.

Portions of money earned through coalition negotiations and leasing was often donated to the community, either from individuals or from coalitions collectively (leftover membership fees)

"I said, 'You know, we need to donate back to the community, too.' I gave \$1,000.00 to the church. I gave money to the VFW, the Little League, the Civic Club for their scholarship fund. I had a list. I'd been making a list while I was anticipating getting a lease, of who should get donations, so I did that." (Farmer 3)

Landowners were often allowed to sign coalition leases as individuals after a signing day \rightarrow coalitions affected the leasing negotiations of those who weren't in coalitions but did own mineral rights

Advantages: Community Capacity

Coalitions provided a benefit to communities by creating a space for new relationships to form

New relationships formed and maintained with neighbors and community members

"It was a great way for me to meet people in the community and for people to then get to meet me... I still keep up on those relationships" (Leadership 2)

This sometimes expanded networks and increased human resources

"If things come up in your life or you have a question that—now I might know somebody that would have an answer for me or have advice for me... I think it's definitely grown my inner circle, so to speak" (Farmer 9)

However...

Disadvantages: Individual vs. Group Needs

Landowners with unique needs or interests may not benefit from joining a landowner coalition

Individual goals and needs may not align with those of the collective group

"Everybody's unique. Everybody has different family situations, financial situations, personal situations that will drive you to need or want to desire a lease different than your neighbor. You join a landowner group, you're getting a one-size-fits-all. You might lose out on... something that is particularly of need to you, but might not be of need to me" (Key Informant 1)

Large landowners may do just as well without participating in a group due to the negotiation power they held by owning large blocks of land, and can tailor negotiations to their individual needs

Disadvantages: Those Left Out

There were groups of people that may have been left out of the coalition process, and therefore not able to appreciate the benefits discussed above

Who is NOT able to participate?

Those who don't own land

Landowners who do not own their mineral rights

Those who signed early, perhaps out of financial need (may have received \$150/acre compared to the coalitions \$2,500 for example)

Disadvantages: Timing

Landowner coalitions often underwent lengthy negotiation processes

"If you have a farmer who's behind on mortgage payments, or they've got a huge grain bill, they're gonna go after that \$100 an acre... cause they're thinking, 'I might not have this farm two years from now. I might be in foreclosure'" (Farmer 3)

"If it's someone that needs the money right now, it's probably not the way to go because it could take time. I haven't seen a landowner group that didn't take more than probably a year" (Key Informant 10)

Cases of landowner groups taking an offer rather than continuing negotiations because some members needed the money immediately

ADVANTAGES

DISADVANTAGES

Greater negotiating power due to increased knowledge/expertise and offering large blocks of contiguous acreage

Leveled the playing field amongst landowners (small and large) and between landowners and gas companies

Benefitted community:

- Raised the standard of leases
- Made donations from groups or group members
- Requested companies fund community development projects
- Created a space for new relationships/connections/skills

Focused on group needs over those of a particular individual

Groups of people were excluded for a number of reasons:

- Not able to afford to wait
- No land ownership
- No mineral rights ownership

Variables of Coalition Success

Internal Group Characteristics

- Group size: benefits to both large and small
- Trust: in leadership specifically

External Contextual Factors

- Location: with regard to formations and company leaseholdings
- Market conditions
- Willingness of company to work with landowner group

Are there specific effects of participating in landowner coalition on agricultural operators in Pennsylvania?

Impact on Farmers: Economics

From initial offers of \$2 or \$25 per acre to the \$1000s per acre that some landowner coalitions received, the income for farmers changed from a small boost to a large windfall earning

Generally little income remained after taxes and paying off debt and making upgrades (except in the case of ongoing royalty payments)

However, there were many ways in which the income improved the financial situations of farmers

"many farmers found themselves in the position that they are debt free for the first time in their lives. They don't have to worry about making payments on their farm. They live in a nice house. They have a new truck, maybe a new tractor, and they have given their kids some money" (Key Informant 7)

Impact on Farmers: Future of the Farm

For some farmers, this income protected from having to sell part or the entirety of their farm

For some farmers, the income from gas leasing was the first time in a long time when it made financial sense to continue to own their land

Able to avoid selling the farm or selling a parcel to pay taxes (avoid subdivision)

"a lot of our aging farmers, in order to keep the family farm, which they love so dearly, the lease money would help them to be able to do that" (Farmer 10)

Key benefit was that it was a liquid asset, something farmers generally have little of

Opened opportunity for next generation to farm successfully and profitably

Impact on Farmers: Effects on Land

Some lease terms attained by coalitions included protections for the land leased that were especially important for agriculturalists

Compensating landowner for any resources used or damaged

Reclamation of well pads or any other land disturbance: stipulations about keeping soil layers separate and reestablishing them in correct order

"By the reclamation process, and by having a good standard, a high standard of reclamation in our lease, the land is really returned right back to the way it was" (Farmer 10)

Land protection and reclamation important for maintaining production value

Impact on Farmers: Reinvesting in the Farm

Additional earnings through coalition negotiations provided an opportunity for agriculturalists to reinvest in their farming operations

Farmers used money to purchase additional cattle, more efficient farming equipment, and new vehicles

Respondents described many of these upgrades as simply catching up with improvements that should have or could have been made years ago if financial situations had allowed.

Opportunity to make operations more profitable and/or more sustainable

"You didn't see the farmers leaving because they had a windfall, you saw them fixing their places and re-investing to be farmers" (Respondent 8)

Impact on Farmers: Quality of Life

The income generated through gas leasing certainly effected the quality of life of some farmers

Allowed farmers to cut back on work hours or change the type of work (ex: from dairy to beef)

"It gave me the opportunity to not be working five, six and seven days a week, daylight 'til dark because I had enough money where... I didn't have the same concerns I had had before it. I could rely on the money I received from the gas lease" (Farmer 8)

"I kind of see it as a way of hopefully being able to keep the farm and still live a life, have family time, and actually enjoy it a little bit" (Respondent 13)

New relationships between farmers and with their non-farm neighbors

Impact on Farmers: The Negatives

Expecting windfall earnings, spent money that was never received

Unforeseen tax and legal implications of windfall of income

Struggle of agricultural suppliers as operations changed or farmers retired

Length of time necessary to truly reclaim cropland

"What we didn't know was how long it took to reclaim crop land after—they did a good job... but when you disturb the chemistry and biology of topsoil, it takes just about five years for it to get that biology and that organic matter and chemistry back to where it was... That's one thing we learned the hard way" (Farmer 6)

Impact on Farmers

Economics

• \$25 to \$1000's per acre changed earnings from a small boost to a windfall of *liquid assets*

Quality of Life

- Older farmers able to retire
- Change in operation to something less laborintensive

Operation

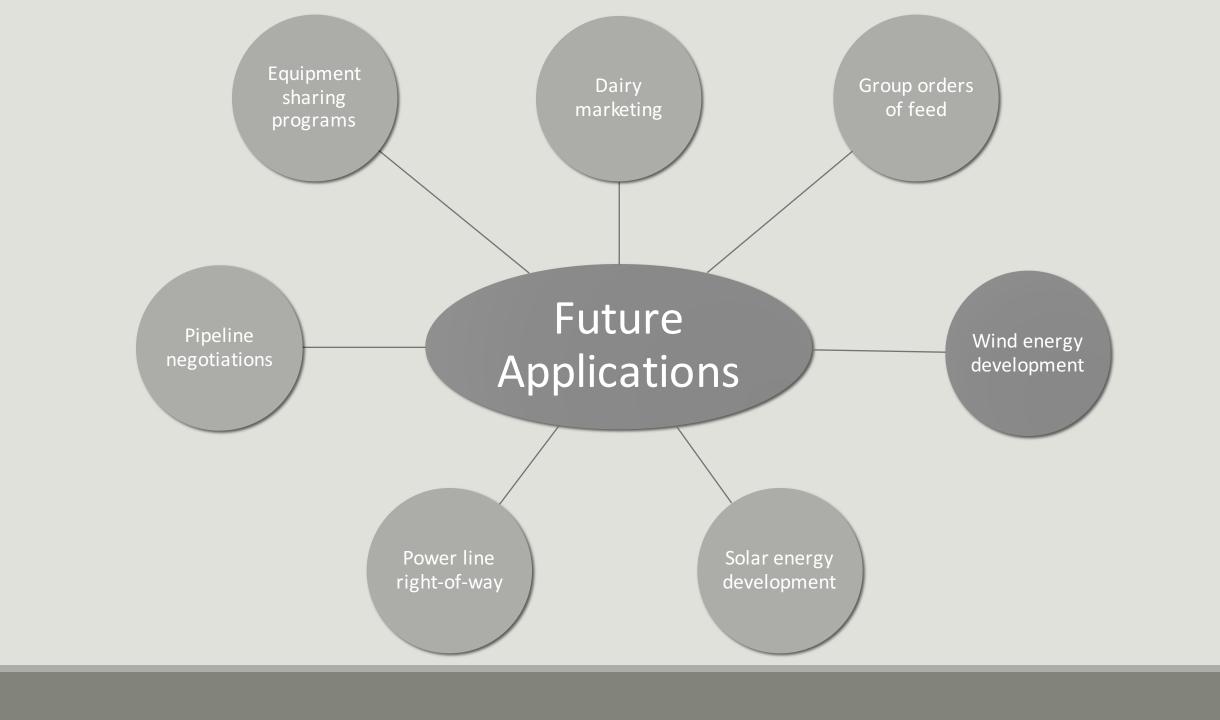
- Protection from selling part or whole farm
- Opportunity to reinvest in operation

Lease Terms

 Reclamation of well pads and input into siting development particularly important

Negatives

- Large windfall of income expected and spent before earned
- Unintended effects of income (estate taxes, etc)
- Wait time for land to return to productive capacity



Conclusions

Landowner coalitions only work for certain people

Coalitions increase the power and control of private landowners in land use decisions

Coalitions lead to more lucrative and protective leases in most cases

Coalitions both build and benefit community

Landowner coalitions transformed natural gas leasing in some areas of Pennsylvania Coalition model already utilized for wind development, and may have potential for other applications

Limitations

What does this research NOT tell us?

Difficulty in isolating effects of landowners

- Coalitions affected individual leasing
- Hard to consider what leasing would have looked like without them

Snowball and convenience sampling could have led to self-selection

- Of satisfied members
- Of successful coalitions

Small geographic area

Thank You



Questions?
Comments?
Feedback?



Limitations and Future Research

LIMITATIONS OF THIS RESEARCH

Difficulty in isolating effects of landowners

- Coalitions affected individual leasing
- Hard to consider what leasing would have looked like without them



FUTURE RESEARCH OPPORTUNITIES

Addition of comparison groups

 Farmers and non-farmers who signed as individuals

Track lease terms and addendum across time for coalition and individual leases

Snowball and convenience sampling could have led to self-selection



Survey of landowners who participated in a coalition, if a list of those individuals could be assembled

Small geographic area

Expanding study area to other areas of PA and other shale plays (case study in SW PA)

Study Counties

County	Unconventional Wells	Number of Farms	Number of Ag Acres	Population Density
Bradford	1,416	1,629	308,000	55
Susquehanna	1,405	1,005	166,000	53
Wyoming	269	508	69,000	71
Wayne	5	711	113,000	73
Lackawanna	2	303	32,750	467

Table 1: Number of Unconventional Wells, Number of Farms, Number of Acres in Agricultural Production, and Population Density (persons/square mile) by Study County

Sources: PA DEP 2017; 2012 Census of Ag; U.S. Census Bureau, 2000;