2019 Confinement Site Manure Applicator Certification Evaluation
Iowa State University Extension and Outreach

Responses from Workshops: 566 DVD 161 Total of all Responses Collected: 727

Section 1- Please rate today's information	**Excellent**	**Good**	**Fair**	**Poor**	**No Response**		**Total Responses**
1. Impacts of manure management and cover-crops on drainage water quality and yields	413	298	14	1	1		727
Percentage	57%	41%	2%	0%	0%		
	Excellent	**Good**	**Fair**	**Poor**	**No Response**		**Total Responses**
2. Manure Timing	397	306	12	0	12		727
Percentage	55%	42%	2%	0%	2%		
	Excellent	**Good**	**Fair**	**Poor**	**No Response**		**Total Responses**
3. DNR Rules	364	343	14	0	6		727
Percentage	50%	47%	2%	0%	1%		
	Excellent	**Good**	**Fair**	**Poor**	**No Response**		**Total Responses**
4. Land applicaton and Separation Distances	392	318	9	0	8		727
Percentage	54%	44%	1%	0%	1%		
	Excellent	**Good**	**Fair**	**Poor**	**No Response**		**Total Responses**
5. DNR's Top Violations	377	325	8	0	17		727
Percentage	52%	45%	1%	0%	2%		
	Excellent	**Good**	**Fair**	**Poor**	**No Response**		**Total Responses**
6. Manure and Nutrient Movement in Soil	390	306	14	0	17		727
Percentage	54%	42%	2%	0%	2%		
	Excellent	**Good**	**Fair**	**Poor**	**No Response**		**Total Responses**
7. Iowa DOT on Road Rules	359	323	19	1	25		727
Percentage	49%	44%	3%	0%	3%		
Section 2- Overall evaluation:							
	Agree	**Undecided**	**Disagree**	**Does Not Apply**	**No Response**		**Total Responses**
8. The information presented today was useful for my farm operation?	675	30	1	6	15		727
Percentage	93%	4%	0%	1%	2%		

Section 3- Discussion Topics I Evaluation Scenario	
Fall Application vs Spring Application vs Sidedress	
9. What would be some of the bigger challenges to moving towards in-season application?	See Tab 9.
10. What do you think is a realistic expection for percent of manure applied in the fall/spring/sidedress?	See Tab 10.
Topic 2 I Manure Value and EconomicsCover Crops	
11. The results of ISU studies suggested 10-45 bu/ac improvement from early manure to late fall manure, a potentioal imporve of 33 bu/ac to spring. At $3 corn, this would be a $30-$135 for fall and/or $100 from fall to spring. What does this mean for manure value?	See Tab 11.
Evaluation Scenario I DOT Transportation Evaluation Scenario	
12. What are the top five most important transportation tips you would tell a new employee before they go on the road for the first time?	See tab 12.
13. Is there a topic you would like to hear about during next year's training?	See tab 13.

9. What would be some of the bigger challenges to moving towards in-season application?
20" rows, contours, terraces
able to get all manure hauled in late fall
all different equipment, timing
already do all 3
application compaction
application timing
bad weather
being able to apply it without hurting the standing crop
being able to efficiently haul manure while sill maintaining proper soil health (compaction issues) and avoiding crop damage
being able to get into field, pits overflowing
benefit vs cost of corn lost in process
climate, time constraint
compacation, not enough man hours to spring apply or sidedress
compaction
compaction
compaction
compaction
compaction
compaction
compaction
compaction
compaction
compaction
compaction
compaction
compaction
compaction
compaction
compaction
compaction
compaction
compaction
compaction
compaction
compaction
compaction
compaction
compaction
compaction
compaction
compaction
compaction
compaction and being on time (too much rain causing delays)
compaction and man power
compaction and shear volume of manure, equipment needs
compaction and timing if a lot of rain
compaction impacts on yield, timing on injection and planting
compaction is the main issue in the spring
compaction issues
compaction issues, timing
compaction, ability of getting manure hauled due to weather
compaction, available time before rain
compaction, crop damage
compaction, crop damage, timing, land slope
compaction, cutting roots, open up the ground to dry out, ride over cover crops
compaction, different equipment
compaction, driving over crop
compaction, enough dry days, equipment not set up for sidedress - equipment costs
compaction, equipment challenges
compaction, equipment cost, time
compaction, equipment size
compaction, equipment, time
compaction, excessiver crop destruction
compaction, if weather does not work you cannot haul until fall or sidedress
compaction, labor
compaction, limited amount of time before planting
compaction, long time
compaction, new equipment
compaction, planting behind manure application (cold wet soils)
compaction, rainy season
compaction, short time frame, crop damage
compaction, soil holding capacity
compaction, time
compaction, time accessability to get everthing done, damage to crops from running over plants during sidedress application
compaction, time constraints
compaction, time, equipment
compaction, time, equipment changes, labor
compaction, timeliness, field conditions
compaction, timing
compaction, timing
compaction, timing risk
compaction, timing to get everything done
compaction, timing, weather
compaction, timing, weather dependent

compaction, timing, wet spring
compaction, timing, work load
compaction, tires, equipment for row crops
compaction, weather risk
compaction, weather, extra storage, timing
compcaction
compcaction, timing, weather
compcation, crop damage, weather
compcation, damage to crop
compcation, equipment, timing
compcation, having time to do it
compcation, labor, equipment, time
contours, end rows damage
contours, point rows, hill side drift
corn on corn vs commercial N
cost and time, wheel spacing of machinery
cost and timeling
cost and timing of application
cost of application equipment, availability of application equipment
cost of equipment
crop damage
crop damage
crop damage
crop damage
crop damage
crop damage
crop damage
crop damage
crop damage during application in our terrain
crop damage, compaction
crop damage, distance
crop damage, equipment available, volume
crop damage, not enough time, compaction
crop destruction
crop destruction
crop production
crop, damage/compaction
cutting roots, running over crop
dairy manure is pretty dilute, so would be difficult to side dress. Timing and weather can make it difficult to get manure applied.
damage to turn rows, compaction
different equipment, cost, ride over crop
different machinery requirements
doing it without destroying the crop - it's hard enough to sidedress commercial N before corn gets too big
driving over crops, compaction
Dry enough weather to get manure out of barns, compaction
dry weather
early fall application with snow on ground, wet spring
efficient
enough time, rain amounts
environmental
equipment
equipment
equipment
equipment
equipment
equipment
equipment
equipment and storage
equipment availabilty
equipment available in the market, running over crop, more labor, crop stress
equipment change, rate
equipment changes for row crop usage, crop damage from running over
equipment cost, soil compaction
equipment does not fit in rows
equipment needs, price
equipment size and time to accomplish
equipment that doesn't destroy crops
Equipment to apply in between the rows
equipment, compaction
equipment, compaction, crop damage
equipment, time
equipment, time availability
equipment, time availability
equipment, timing
equipment, timing
equipment, timing
equipment, timing, compaction
equipment, timing, compaction
equipment, timing, compaction, risk of pit flow
equipment, weather
fall - if a bad fall, harder to get it on and tough is knifing, spring - compaction ?
fall application
fall vs spring

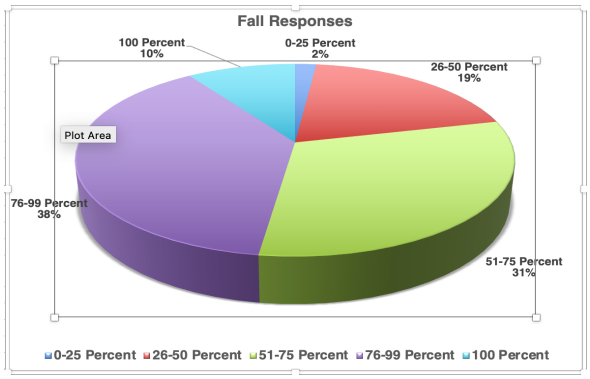
fall weather chases you to get done, spring weather and getting ready to plant and compaction, side dress is probably the best but hardest to get done.
field compaction, damage to roads in spring
field conditions, storage size/amount, management
following the rows
frozen ground
gallons per acre/row/
get crops in on time, fields stay so wet on your heavy clay
getting down the row without destroying the crop
getting ground tilled
getting it all applied before corn becomes brittle and snaps off from being driven over. Sidehills and contour farming makes it hard to stay in between the rows.
getting it all done
getting it applied before V5 stage and wet conditions
getting the proper equipment to not damage the existing crop
good
ground can freeze
ground conditions, too much manure, rates, cost of application and types of application
having equipment to apply in the rows
having it get dry enough to carry a spreader without compaction
having row crop manure equipment
having the right equipment
having the right equipment, weather
having the time to get it done
having time to apply before planting, storage apacity for manure, compaction, weather, application window
Having time, compaction
hills, point rows, running over lots of crops in ground that isn't flat and square
how much nitrogen is lost between fall application and spring application
if dry
if it can work as far as timing for your operation
is there enough time to apply
labor, rainfall, compaction
labor, season length
labor, time, equipment
labor, timing, compaction
land
land availability
logistics and contour/crop damage
machinery crop damage
may do some cover crops
might need to side dress
moisture and time to move it
moisture, compcation, weather, time
money
moving towards in season application, wet land
mud, compaction
new laws
nitrogen loss
no time and riding over crop
not enough holding capacity for a full year
not enough storage
not hurting the crop
only do 50% in spring
our topography in NE Iowa
possibly a different set of equipment
practical equipment, too expensive, wrong wheel space, too heavy
praying for good weather
precipitation
proper equipment, nutrient loss, smell - odor
proper ground conditions being frozen or too wet
rain
rain, frost
rain, rain & timing
rainfall, weather, field conditions
rate and equipment issues
right equipment
row guidance
row spacing
row spacing
row spacing, equipment, people
row spacing, timeliness
running down the crop
running over crop
running over crop
running over crop
same issues but with crops in the way, temperature
short fall, short spring
sidedress would take different equipment; sidedress takes more time
sidehills
size of equipment, destroying crop
size of tank, compaction
smaller application window, possible wet conditions, storage limitations
soil compaction
soil compaction and window of opportunity to apply

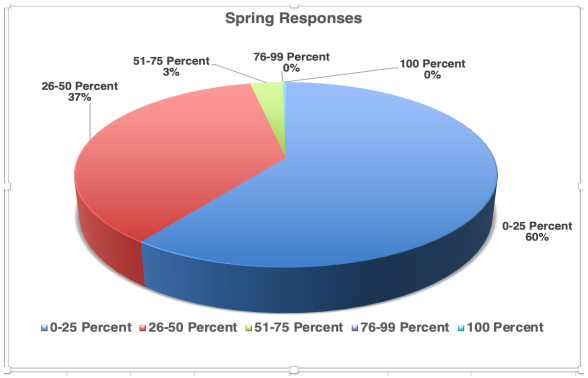
soil compaction with tank application and the window of application is short
soil compaction, row configuration
soil compaction, soil moisture
soil compaction, time constraints
soil conditions
soil conditions and moisture
soil conditions usually wetter
soil conditions, crop damage
soil type, conditions, can soil hold it
soil water holding capacity/run off
soil, moisture, weather
sometimes weather makes it so hard to get things done in a timely matter
Spring, too much compaction, weather factor, fall more time
takes more skilled operators, crop damage
the crop, timing
time
time
time
time
time
time
time
time
time
time
time
time and different equipment needed. More problem with wet field conditions in spring
time constraints
time constraints and compaction for spring application
time frame and weather
time of application, weather
time of applications
time to do application, storage capacity
time to get done in short period
time to get done on time
time, compaction
time, compaction
time, compaction
time, early cold weather and snow
time, economics
time, equipment
time, ideal conditions, being efficient
time, labor, damage
time, skilled labor
time, soil and crop damage, proper equipment
time, soil conditions
time, soil conditions, compaction
time, weather
time, weather
time, weather
time, weather
time, weather
time, weather, extra equipment
time, weather, full pit
time, weather, labor
time, weather, labor
time, weather, man power
timeliness
timing
timing
timing
timing
timing
timing
timing
timing
timing
timing
timing
timing and application methods
timing and compaction
timing and crop damage
timing and volume
timing and weather
timing and weather
timing of application
timing of application to side dress
timing of getting all work done in spring and compcation concerns
timing rainfall
timing, compaction
timing, compaction
timing, compaction
timing, compaction
timing, compaction
timing, compaction

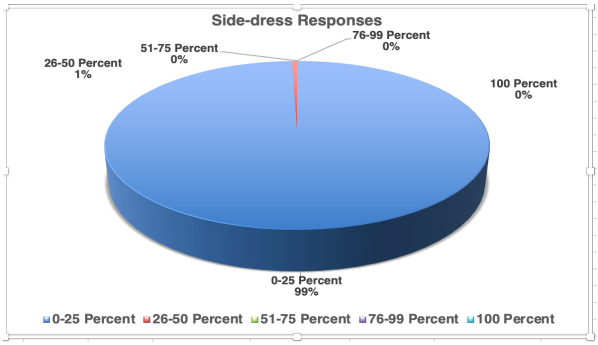
timing, compaction
timing, compaction, and weather
timing, compaction, risk of having pits too full and not being able to apply it
timing, compaction, weather
timing, compaction, weather
timing, compaction, weather
timing, compaction, weather
timing, compaction, weather
timing, compaction, weather, risk
timing, conditions, compaction
timing, equipment
timing, labor
timing, labor cost
timing, logistics
timing, season length
timing, volume to be applied - based on weather and soil conditions
timing, weather
timing, weather
timing, weather
timing, weather
timing, weather
timing, weather
timing, weather
timing, weather conditions, man hours available
timing, weather, appropriate application equipment
timing, weather, compaction, crop damage
timing, weather, size of crops
timing, window of application, weather, compaction
To work on application later in fall, more spring application
tonage able to haul
too many gallons required per acre
too many passes to sidedress manure, run down too many end rows. Specialty equipment to sidedress
so higher machinery cost per acre
training for employees, proper equipment, crop damage
value increase
value, compaction, time
very good value except for compaction in the spring
volume of manure to incorporate
volume, compaction, time
we use a drag line and will move all of our liquid in season
we use a hose system and it won't work
wealth
weather
weather
weather
weather
weather
weather
weather
weather
weather
weather
weather
weather
weather
weather
weather
weather
weather
weather
weather
weather
weather
weather
weather
weather
weather
weather
weather
weather
weather
weather
weather
weather
weather
weather
weather
weather
weather
weather
weather
weather
weather
weather
weather
weather
weather
weather
weather
weather
weather
weather

weather
weather
weather
weather
weather
weather
weather
weather
weather
weather
weather
weather
weather
weather - always wet in spring, tight soils, clay pores
weather - being able to get manure hauler in decent time
weather - compaction
weather - equipment size
weather - wet, not enough storage to go 12 months, need different equipment to sidedress
weather & time - hard to leave a corn crop in the ground to apply manure
weather and getting over the acres
weather and time
weather and timing
weather conditions
weather conditions
weather, compaction
weather, compaction
weather, compaction
weather, compaction
weather, compaction
weather, compaction
weather, compaction
weather, compaction, crop injury
weather, compaction, time
weather, compaction, time
weather, crop getting big
weather, crop growth, cost
weather, crop size
weather, crops
weather, equipment
weather, equipment
weather, equipment
weather, equipment, labor
weather, fall harvest
weather, labor, timing
weather, man power, compaction
weather, moisture, field conditions
weather, rain, soil conditions
weather, short application window for fast growing crop
weather, small window to apply
weather, soil compaction
weather, soil conditions
weather, soil conditions, compaction, storage, timing
weather, temperature
weather, temperature, soil conditions
weather, time
weather, time
weather, time
weather, time, compaction
weather, time, compaction, labor
weather, time, compaction, smell for neighbors
weather, timing
weather, timing
weather, timing
weather, timing
weather, timing of sidedressing
weather, timing, wet
weather, wetness
wet fall, early freeze
wet fields
wet soil
wet spring
wet spring
wet spring, early fall with snow on the ground
wet spring, work load
wet weather
wet weather
wet weather, soil conditions
wet weather, volume, compaction
wetness
wetness
yield increase, more time in fall

10. What do you think is a realistic expectation for percent of manure applied in the fall/spring/sidedress?







11. The results of ISU studies suggested 10-45 bu/ac improvement from early manure to late fall manure, a potentioal imporve of 33 bu/ac to spring. At $3 corn, this would be a $30-$135 for fall and/or $100 from fall to spring. What does this mean for manure value?

$30.00
$100
$150
$150
$100/acre
$125 per acre; must haul after 50F or you will have these losses
$125-$150/acre
$150/acre
$150/acre applied
$150/acre applied
$70 to $80 an acre
$80-$90/acre
$85/acre for late fall, $50/acre for spring. P levels are too low for good value. N level is inconsistent
$90 per acre
$90/acre
96,000 lbs gross trailer wt, 24,000 lbs - 28,000 lbs/axle
a good value - timing is important
a late fall or spring application has the possibility to increase yield - that is if it is economically fit to do either
A lot of benefits, but can you get in and what happens if you don't get in with your crop and storage?
A lot of risk to count on manure application in the spring. I don't like any manure application in the spring unless it is absolutely needed. a lot of value
about $3 per 1000 gallons
already do spring pumping
an increase
Application timing = impact on loss or gain
apply as late as possible
Apply as much as possible in the fall to maximize yields and value
apply below soil temp of 50F
Apply late
apply late fall
apply late fall
apply late fall for most value
Apply late fall if possible
apply manure as late as possible otherwise manure isn't worth very much
apply the manure in late fall or spring
apply when you can, a wet spring will cost you more
applying closer to planting has a better ROI
applying manure later is better if possible
be safe
best value of manure is late fall application; still a good return on spring applied manure
better if it is applied when crop needs it
Better in spring
better in spring but packs soil too much
better in the spring
better late
better to do in the spring
Better to do spring apply manure
better to haul in fall and less compaction
better to haul in spring
better use of nutrients which means less commercial N purchased
better yield, worth the cost
Big advantage or can reduce amount of commercial fertilizer
brings value
but we don't know what the spring weather will bring, may not get it applied
Can really help finances
check for leaks
check lights
check tires
check vehicle, watch speed, check load, be safe, know weights
closer to plant use is better
closer to planting time the more N is available
Compaction, timing. $80-$90/acre
cost of time and equipment in spring, conditions need to be right spring or fall
cost to haul or transport long distances often cost more than you get for the nutrient value/acre
could be of more value if able to apply in small spring window
decrease in value in time
decreases
definitely spring anure has more value but no way possible to get all acres covered in spring; timing?
depends on ability to timely apply
depends on compaction losses
depends on spring weather conditions and timing
Depends on the weather
do pretrip inspection
Do right time if can
Does spring manure negatively effect compaction?
don't make a mess
double or triple the value - we only do late fall or spring
Earlier you put the liquid on, the less value it has and the bigger penality of yield
Early applied is less valuable, but last year I waited and caught and did not get it all pumped
Early is better
Early manure may be more economical in the long run with a stablizer
early spring is the way to go for big value. Micronutrients have good value
emphasis on the importance of our manure, try to haul as late in the fall as possible

Equal to commercial fertilizer cost
Even if you need to apply manure early fall, it's more beneficial to still apply manure than not applying manure
exceptional use compared to commercial fertilizer when applied properly
give others the rights of way
go slow
goes up
goes up
goes up
goes up
good
good for a dry spring
good to apply late
great value
hard to get applied at any time
has a higher value in late fall
Has a lot more value than we think. Need to address putting less on per acre.
has more value applied later
has more value in the spring
haul in the spring if time allows
High value
High value on spring application
higher in fall
Higher in fall with stabilizer
higher value of course based more on soil types
I better do late fall or spring application
I don't think it means anything about the manure value, it just means that if you don't have to haul when the ground is about 50F, then don't, but if your pit is full or the custom applicators are at your site, I guess it has to be put on.
I have not seen much of a yield difference, but there is an increase for spring over fall application.
I should charge more/less depending on date applied!
If able to, spring application is the best time due to nitrogen loss. Also, cover crops and inhibitors help keep the nitrogent available. More nitrogen = more bushels = more money
If applied at the right time the manure value increases
If possible wait until soil temperature is under 50F
if possible, it is better to apply in spring if not too wet
if total N application ever gets regulated manure will be a liability to get rid of. There is not enough to get manure applied in the spring conditions.
improves the value of the manure
Improves value if weather allows
Increase
increase
Increase
increase in value
increase in value
Increase it's value
Increase manure value with different application timing
Increase value applied in spring
increase value of manure but cannot all be applied in spring
Increased manure value
Increased value
increased value
Increases
increases its value as long as the weather works with your plan
Increases the value
Increases value
Increasing value
It has always had value, just takes timing
it has value, best time to apply, also depends on weather conditions
It holds value better before soil temps drop below 50F
It hurts to put on manure when it's too early or too warm in the fall because you lose too much - just like anhydrous
It improves the value
It increases the value of manure
it is a risk management
it is a time thing, if we had nothing to do would be great
it is good
It is more valuable in late fall and spring
it is more valuable in the spring
It is valuable
It is valuable
It is very valuable to the crop
it is worth more in the spring than in the fall
it lowers the value of manure for the farmer
it means manure has value when applied at the right time
It means we should apply as late into the fall as possible and spring manure has yield benefits as long as you don't suffer from high compaction.
It pays to apply in a timely manner
It should be higher
it varies
it would directly gain value compared to the price of commercial fertilizer
It's a lot better. No fertilizer cost, but have compaction
It's a nutrient to use wisely
It's better than commercial
It's better value for the manure to be applied in the spring
it's going up
it's good
It's more valuable due to timing
it's more valuable the later you apply it
it's not worth as much in the fall

it's valuable
it's value increases if we can apply late fall or early spring
It's worth it
its more valauble depending on timing
its still worth nothing
late applied manure is more valuable to crops
Late fall and spring application would be very valuable for the price of fertilizer
late fall application for most value of manure for my operation
late fall application is important for value as fertilitzer
late fall is a bigger value
late fall or spring is best
late spring manure is more valuable
later application is more valuable
later applied the better yields
later is more valuable
later the better
Later the better, spring is best
less compaction in the fall
less leaching in spring
less nitrate losses
less side dress N needed with late fall and spring applied
Less value in fall
less value when applied in early fall
liquid gold, apply wisely
lock break
losing manure value in fall application vs time to do in spring
losing your manure value
lot of variables to consider, manure is equal or better than commercial
make sure have husbandry sign if necessary
make sure straps or tarps are used if necessary
makes it more valuable
manure can really help yield if it put no current
Manure continues to be a valuable and economical source of fertilizer.
Manure equipment driven on load is subject to weight requirements
manure handled and applied properly will increase yields
manure has great value to the crop
Manure has more value in spring, but there will be reduced yields in traveled areas
manure has more value in the late fall and spring for application vs winter and summer when sidedressing is necessary
manure has most value when applied in timeley manner when soil is under 50 degrees
Manure has value in either spring or fall
manure in fall needs additional N in spring (commercial fertilizer)
manure is a good resource for our crops
Manure is more valuable in the field
manure is more valuable when applied in the fall
Manure is move valuable than commercial fertilizer
Manure is valuable
manure is very valuable but sometimes you have to apply to maintain animal health
Manure is very valuable.
Manure is very valuable. Much better to apply in spring where less nitrogen loss is possible. Presents problem if wet spring - compaction, time, etc.
manure value gets better if applied in late fall
manure value important relative to crop usage of available N
manure value increases
manure value is better in cooler weather, possibly better in spring
manure value is better in spring
manure value is higher in late fall or spring. Manure value is lower in early fall.
manure value is lost the earlier you apply
Manure value is very high if applied properly and timely
Manure value is worth more in late fall/early spring
manure value would be higher from fall to spring, although, it would be harder to find time to apply in the spring.
manure value would be increase, but logistically difficult
Manure values are very variable; is there a better way to analyze the samples?
manure worth $45 more
money
More emphasis on getting all available manure applied in the fall for best economic value
more money
more money
More return for N on spring applied
More valuable
more valuable
more valuable
more valuable applied in spring
more valuable depending on when applied
more valuable if applied late fall, even more value if applied in spring
More valuable in spring
more valuable in the spring
More valuable in the spring if you can get it applied
more value
more value at proper timing
more value for late applied
more value for spring
more value from spring application, less time for leaching of nutrients in spring application
more value if can be applied late fall or spring
more value if manure is applied in spring
more value in fall applied
more value in spring time

more value in the spring
more value in the spring
more value in the spring, but what about compaction
more value late fall and spring applications
more value later in application season
more value the later is applied
more value to apply later
more value you are getting more N
more value/worth more than commercial fertilizer
more valueable when applied when weather benefits you
much better to apply at proper time, big money difference
much more return on late season application
much more valuable in late fall and again in spring
N is available right away
Nitrogen worth more in spring
not much - it's more important to get it applied
not value it is necessary
nothing - can't get it all hauled as it is
nothing. You still have to put it in the field when you can - spring or fall - early or late, doesn't matter
on paper looks good
potentially makes spring manure worth more assuming it is applied correctly
pretrip inspection
pretty good!
Price should go up
price would be based on timing of application
probably should apply in the spring
Probably try and hold off until later on application
put it on late fall
Put it on later
Put on as late as possible and/or put as much on in spring as feasible
Put on late or early spring
rely less on commercial fertilizer
remains the same
risk management
risk management value
same money
should be easier to sell manure
should vary according to timing theoretically. However, there are other factors involved. The most important being compaction and also time availability.
slow down to turn
some is lost during winter
Something to consider looking at
sounds good! Consider labor available, size of equipment, weather challenges in both seasons
split application - 1/2 fall 1/2 spring where I can run dragline
spring
spring adds value if it can be applied timely and in good conditions
spring appliation pays, but there's a small window to get it applied
spring application can turn ugly if wet
spring application is most beneficial
spring applications are a better return of investment
spring applied has value if weather allows
spring applied manure has more value and less possibility of leaching
spring applied manure is more valuable to crop operation and efforts should be made to apply manure in the spring
spring is always better on our farm, however the challenges are double.
spring manure can be a consistenet value increase while fall can vary depending on timing
spring manure has better value if the weather in spring cooperates
Spring should be looked at for a larger percentage of application. Time the limit and weather
stays close to the same
steadily increasing
Still goes back to timing and storage
still very valuable; all about timing
strapping down fuel tanks
take your time
That if it is possible to apply in spring and late fall, earning potential is great
that it can add a lot of value
That it is worth lots of money
That it pays to own enough manure equipment to apply at the right time
that manure is a very valuable resource for our crops
The ability to postpone application can be an economic benefit, but also a risk to a pit overflow discharge if weather turns bad and doesn't allow for late season application.
the closer application can be done to crop needing it makes it more valuable
The closer to the growing season manure can be applied, the better. Apply manure to gain the most value for the farm operation.
the closer you get to planting, the move your manure value goes up
the late fall and spring has greatest N available
the later the better
the later you can apply your manure to crop the more value you can capture from your manure
the manure application in spring produces more crop results do to less nitrogen loss. Is there an effect due to soil compaction in the spring?
The manure becomes more valuable when applied at the right time
the manure is more valuable in the spring than late fall compared to early fall
the manure value does not change, it is the operations time and demand and priorities that cost or save money
the sooner it is used the better
the timing of application determines the value of the manure to your operation
the timing of application means a lot
the value increases the later applied
the value is definitely there, but can vary. you need to get it done when you can
the value of fall application

The value of manure is greater if the application is applied later in the fall. Your loss of nutrients is less liekly with a later application.
this makes manure valuable, since you can increase profits on crop
then.
Time of application is vital and can make a signification difference
time of application makes a difference on the manure value
time of application matters, temp of soil matters, value decreases over time
time of year makes a difference
timing
timing closest to plant need the better situation if possible
timing is critical for best value and results
timing is everything
timing is important
timing is important
timing is more important
timing is valuable
timing of application is important
timing, determining potential worth
too risky
total of 3 units together
try for fall application
try not to waste it or over apply it because it has lots of value
try to apply late fall or early spring for best availability of nutrients
valuable to use correctly
value and timing play on application
value decrease as application becomes later. Try to spread early if conditions allow.
value goes up for spring
value goes up the closer you get
value increases
value increases
Value increases when application is delayed as long as possible
Value is in the timing
value is more
value is much higher late fall
value only increases if yield response is verifed
value to manure goes up. If wet spring, compaction is bigger impact on yield
value will be determined by soil compaction at the time of application. Manure always builds soil, but does not always reflect in yield.
value will increase
varies on application quality and timing
vehicles of husbandry have a max speed of 35 mph
vehicles that go less the 35 need a SMV sign
Very valuable if they field conditions would be same in spring as they are in the fall. Very small window for success.
wait if you can
wait until late fall
waiting is more profitable
watch for weight limits
we should charge for manure
weight limits
well it also depends on the condition of the use of manure depending on the weather - may be too wet to apply, so it depends on the use
what works best for your operation
When applying in early fall, you have to consider less N credit toward the crop. It would mean you have to apply more or commercial N.
work more if correctly applied and good timing
worth less in fall, worh more in spring
worth money in spring
worth more
worth more if apply later/closer to when the crop needs it
worth more in spring
worth more in the spring
worth more later it is applied, best system is late fall manure with side-dressed commercial N
worth more the closer you are to the crop using it, but compaction could be an issue
worth waiting for spring
Would like to know more about fall application details: soil temp, date, cover crop, application details
would like to utilize it
Yes, I am all for spring application
yield 1/2 of roadway
You still have to get the manure on, so the value is secondary comparred to manure coming through the slats

12. What are the top 5 most important transportation tips you would tell a new employee before they go on the road for the first time?
1 red and flashing light in the back of the vehicle
1 towing unit, 2 towed
1 white light in front
1/2 road only
1/2 roadway
1st axle to last axle gross weight
2 implements and tractor - no more
28,000lbs x number of axles
35 mph
35 mph
35 mph max speed for implements of husbandry
35 mph or less
46,000 lbs tire weight
96,000 lb, 28,000 lb/axle
adequate lighting
Adjust equipment to make sure you can see traffic
allow 1/2 of the road to oncoming traffic
always check over your equipment (tires, lights, etc)
always check tires
always check your vehicle before you leave
always give 1/2 roadway
always havce your manure certification card with you
Always know your surroundings
always yield half the roadway
Amber lights on
anything you are towing - do not go over 35 mph
application rate
Application timing
approved draw bar & safety chains
are safety lights needed on the machine being towed?
Are they comfortable being on the road?
ask questions
ask questions, don't guess
avoid DOT
avoid sudden stops and turns
avoid water sources, separation distances
awareness of safety equipment
awareness of surroundings
axle weight
Axle weight
be a careful and cautious operator/driver
be a defensive driver
Be a defensive driver
Be able to see
be able to stop
be able to take new ideas
be alert
be alert
be alert
be alert
be alert
be alert
be alert
be alert
be alert
be alert
be awake
be aware
be aware of bridge weights
Be aware of other drivers
Be aware of road conditions - know your weight limits
be aware of surroundings
be aware of surroundings
be aware of surroundings
be aware of surroundings
be aware of surroundings
be aware of traffic behind you
Be aware of weight
be aware of your surroundings
be aware of your surroundings
be aware of your surroundings
be aware of your width
be careful
be careful
be careful
be careful
be careful
be careful
be careful
be careful
be careful
be careful
be careful

be careful
be careful
be careful
be careful
be careful
Be careful about momentum when you turn or stop
be careful for soft shoulders
be careful when meeting oncoming traffic
be cautious
be certified
be courteous
be courteous
be courteous
be courteous of others
be courteous to others on the road
be defensive driver
be defensive driver
be in control
be mindful of the weight
be patient
Be safe
be safe
Be safe
be safe
Be safe
Be safe
be safe
be safe
Be smart
Be smart
be sure you have proper safety equipment in place and functioning
being certified
beware of surroundings
beware of your surroundings
brakes
brakes must be sufficient to stop all towed equipment
Brakes on towing unit adequate to stop combination
brakes to stop what you're driving
brakes working
braking distance
bridge limits
bridge weight
bridge weight are gross total, not axle
Bridge weight limits
Bridge weight limits
Bridge weight limits
bridges
call DNR within 6 hours if a spill
call if problem
call in spill
call with questions when not driving
Call within 6 hours (spill)
can only take up 1/2 of roadway
can't drive over 35 mph
cant' stop on a dime
careful
careful turning into fields
carry cell phone in case of spill
carry paperwork
caution is key
caution is key
Certifiy business
chain it down
check air leaks
check all drains and hoses
check all lights
check all lights
check all shut off valves - close completely
check all tires
check amber lights
check brakes
check brakes
check brakes
check brakes
Check equipment
check equipment
check equipment
check equipment - working good
check equipment before using
check equipment every load
check equipment regularly
check equipment regulary
check everything before you leave and do walk around
check for cracks
check for leaks

check if lights work
check if tires are properly full and fastened
check leaks
check license
check lights
check lights
check lights
check lights
check lights
check lights
check lights
check lights
check lights - use them
check lights on trailer and truck
check lug nuts daily
check over equipment
check over equipment
check over semi trailer for safety inspection
check paperwork
check route for bridges
check shutoffs
check signals
check things over
check things over
check tire pressure
check tires
check tires
check tires
check tires
check tires
check tires
check tires and drain plug on wagon
check tires, frame, etc.
check trailer
Check wagon and tractor
check weight limit
check your equipment before you leave
check your vehicle before you drive it
check your vehicle over
clean up spill fast
communicate with each other
communication
comply with all posted weight limits
comply with bridge weight ratings
comply with tire load and speed rating
contacts, procedures of law enforcement in case of emergency
Control speed
copy of license
copy of mmp
correct lighting - flashers, rear red light
correct speed when driving
correct weight on bridges
courtesy to others on roadway
cover intake hole when you go
cover your load
Crazy drivers in cars
crossing a bridge is total combination weight not just portion on the bridge
defense
defensive driving
depth perception and timing
DNR rules
DNR spill number
DNR spill number
DNR spill number
DNR spill number - don't want to call
do a pre-trip inspection, checking for lights working and no leaks
do a pretrip inspection
do a pretrip inspection
do a pretrip inspection
do a pretrip inspection
do a pretrip inspection
do a pretrip inspection
do inspections
do inspections to catch faulty equipment
do not have distractions
do not need registration if for ag
do not put tractor in neutral gear going down hills
do pretrip inspections
do walk around
don exceed tire speed rating
don't assume
don't be distracted - stop if on the phone - it's just too risky
Don't be in a hurry
don't be in a hurry to get to field
don't be over weight

don't be reckless
don't be reckless
don't blame me for your mistakes
don't cut corners
don't drink and drive
don't drive at top speed
don't drive fast
don't drive on ground that already has manure applied
don't exceed tire mph ratings
don't exceed tire mph ratings
don't exceed weight limit
don't follow too close
don't get close to the ditch
don't get pulled over
Don't get so far out on rock shoulder
don't get too close to shoulder of gravel road - might be soft
don't get too close to the side of the road
Don't go over 35 mph
Don't go over 35 mph
don't go too fast
don't have an accident
don't hit anybody
don't load over weight
don't lose your load
don't mess up
don't over fill louds so you don't spill
Don't overload
Don't overload
Don't overload it
don't pull out in front of traffic
don't rush
don't slam brakes
don't speed
don't speed
don't speed
don't spill
don't spill
don't spill
don't spill
don't spill
Don't spill
don't spill
don't spill
don't spill /overfill
Don't spill load
Don't spill load
don't spill manure on the road
Don't start the PTO when you go down the road
don't tailgate
don't take risks
don't touch levers
don't track mud on the road
don't trust the traffic
don't turn corners too short
don't turn fast
don't turn in front of traffic
don't use differential lock
don't use your phone
don’t wreck it
DOT can pull you over. Be ready for a ticket
DOT rules
double check equipment
double check equipment
drive a a speed you are comfortable with
drive accordingly, obey the laws
drive at a speed that you can control vehicle
drive careful
drive careful
Drive carefully
drive carefully
drive decent
drive defensively
drive do not care or respect the area you need
drive for road conditions
drive safe
drive safe
Drive safe
Drive safe
drive slow
drive slow
drive slow
drive slow
Drive slow
drive slow
drive slow

drive slow
drive slow
drive slow enough to maintain control
drive slowly
drive speed limit <35 mph
drive with care
employee must ask employer is vehicle is legal
Environmental safety
equipment is inspected for safe road travel
equipment working
equipment working
evaluate equipment for problems
Familiarize yourself with the equipment
Farm trailer
farm vehicle max speed 35mph
Farm vs Commercial
feel comfortable
Fit anything that needs to be fixed
flashers
flashers working
flashers/SMV signs
flashing lights
fold up wings
follow plan
follow rules
follow signage on road
follow tire regulations
follow traffic laws
follow weight limits
Follows all laws
get certified
get certified
get enough sleep
get enough sleep
get off phone
get out and look
get plenty of sleep
give lots of clearnace to other vehicles
give spill number
give them half the road
go at a speed you are comfortable with
go slow
go slow
go slow
go slow
go slow
go slow
go slow
go slow
go slow
go slow
go slow
go slow
Go slow
Go slow
go slow
go slow
go slow
go slow
go slow
go slow and take your time
Go slow loaded
go slow on corners
Go slow, don't spill
go slow, stop for traffic
go slowly and safety
Good brakes
good brakes
good equipment
good records
good tire condition
good tires
gross weight
handling and operation of your equipment
have access to pertinent phone numbers
Have adequate brakes
have cell phone
have cell phone
have certification
have contact information (manager name, mailing address, cell number)
have DNR phone number on cell phone
Have DNR spill number
have driver's license
have driver's license
have emergency DNR number with you

have flashing lights
have ID with you
have license
have license on you
have license on you
have license on you
have manure management papers available
have paperwork
Have phone or radio with them
Have proper spill control
have safety plan
have spill number in phone
Have to yield 1/2 the road
have your certification card with you
have your flashers on
have your manure certification card with you
have your manure management certification card with you
having safety equipment in place
hazard lights
hazards always on
hazards on
hog exposure to manure
how fast can the machine travel down the road?
how much vehicle can weigh (not over 96,000 lbs)
how to report spill
IDs
if in doubt, stop
if spill occurs clean right away or call if help is needed
if you do, report and secure situation asap
if you spill call it in
implement lighting between sunrise and sunset
improper signage
inspect
inspect
Inspect
Inspect before you drive
inspect equipment
inspect equipment
Inspect equipment before entering road
inspect equipment first
inspect equipment frequently
Inspect the vehicle(s) - check tires, look at wheel
inspect truck
inspect trunk and trailer - everything working
inspect vehicle
inspect vehicle
inspect vehicle
Inspect your ride - tires, lights, brakes
inspection of equipment
Inspections
It's not a race
June - Jan. no more than 28,000#/axle - no more thank a gross of 96,000#
keep aware of other drivers
keep equipment in good conditions
keep it between the lines
keep lights & signs cleaned off
Keep speed matched to conditions
keep the road as clean as possible
keep the truck on its wheels
keep unit and tires clean
keep up on annual inspections
keep your distance between cars
keep your lights on
know controls before starting
know DNR number and have cell phone available
know how to drive your equipment and run your controls, brakes
know rate of application
know regulations of the road
know roadway and bridges
know rules
know rules
know rules of the road
know rules of the road
know separtation distances
know the correct field
know the laws
Know the roads you are traveling
know the weight of your load (stopping distance)
know total load weight
know weight
know weight limits
know what the equipment being operated qualifies as - are safety chains needed, SMV sign, etc.
know where you're going
know where you're going
know where you're going

Know who to call
know your brakes
know your equipment
know your field location beforehand
know your route
know your stopping distance
know your tractor controls
know your tractors capabilities
know/have emergency contact info
knowledge of equipment
Lane ways
leave half of roadway open for other traffic
leave yourself plenty of time to stop
legal waiver
length of whole implement
license
License and signage
license requirement
license/permits
lift wings
lift wings
Light requirements
lighting
lighting - 1 white front and flashing, 1 red, 1 amber rear
lighting - amber/red
lighting requirements
lighting requirements
lights
Lights
lights
lights
lights
lights
Lights
lights
lights
lights
lights
lights
lights
Lights
lights
lights
lights
Lights
lights
lights
lights
lights
lights
lights
lights
lights - sunrise/sunset
lights & flashers
lights all working
lights and flashers
Lights at day time
lights at night
lights clean and working
lights forward and 1 red light
lights must be on
lights on
lights on equipment
lights on low
lights working
lights working
lights working
lights working
lights working
lights working
lights working
load loss
load loss - spilling
load securement
load securement
loaded and empty tanks use different roads when possible
loaded tanks have the right-of-way before empty ones
location of field
location/rate
look
look
look
look
look at bridge rate

Look at bridge signs
look back before you go onto road
look both ways for traffic
look both ways twice
look both ways twice
look for traffic
look for traffic
look in mirror before turning
look twice
loss of load (tarp)
lots of weight
maintain manure separation from house, businesses, etc.
Maintain safe speed
maintain safe travel speeds
maintain truck/trailer tires, brakes, etc.
make good wide turns
Make sure all lights are working
make sure all lights are working
make sure all lights are working properly
make sure all lights are working properly
make sure brakes work
make sure breaks are to to stop load
make sure equipment is good
make sure equipment is in good working order
make sure everything is working
make sure everything works
make sure everything works
Make sure flashers and lights are on
make sure gates are shut on truck
make sure hazards/lights, etc. are functioning and visible
Make sure he knows he has to yield the right of way and stay in his lane
make sure its hooked up properly
make sure knives and hoses are empty
Make sure lights all work
make sure lights and placars are in place
make sure lights are always working
make sure lights are on
Make sure lights are properly working
make sure lights are visible
Make sure lights are working
make sure lights work
make sure lights work
make sure lights work
make sure lights work
make sure lights work and are clean from dirt and manure
make sure lights/flashers work
make sure load is secured
make sure load is secured
make sure load is secured
make sure load is secured
make sure load is secured
make sure load is strapped down
make sure mirrors are clean and adjusted
make sure no leaks
make sure safety chains are hooked up
make sure safety equipment installed
make sure signage is good
make sure SMV is visible
make sure spreader is labeled correctly or trucks (CMS #)
make sure to give 1/2 the road to others
make sure to have all of your hazard lights on and working
make sure tool bar is up
make sure tractor and trailer are in good road condition
make sure turn hydraulics on before corners
make sure valves close
make sure warning lights are on
make sure you are not leaking manure
make sure you are within the weight limit
make sure you have a SMV sign
make sure you have adequate space for pulling onto the road, turning, etc.
make sure you have all your brakes working
Make sure you have proper signs and numbers on tanks
make sure you have your permit/license
Make sure you know how to run the tractor
make sure you know where you are going
Make sure you know where you are going to spread the manure
make sure you stop immediately if a spill starts
make sure your vehicle (tractor, trailer) has proper lights
make wide turns
make wide turns
makes sure load is secure
Manure is heavy and will move you
manure pushes tanks around
Manure sure all lights are functioning
mark sure have signage

max of 3 vehicles in a combination
Max speed on farm equipment 35 mph
mechanics of machinery
minimize phone use
mirrors
mirros adjusted before even getting on the road
Monitor speed and make sure of your stopping
move over for oncoming cars
move over for oncoming traffic
move over for other vehicles
must comply with bridge load limits
must have SMV sign
must use lights, headlights, and amber flashers during the day
must yield 1/2 of the road
must yield 1/2 of the road
Must yield 1/2 of the road to vehicles
Must yield at least 1/2 the road
must yield half road way at all times
need one red light
need to be alert
need to be properly lighted
need to comply with bridge weight
need to yield 1/2 of roadway
need white light on front and red on rear visible from 500 ft on implement
never think someone is thinking like you
no cell phone
no cell phone
no cell phone
no cell phone use
no cell phone use on the road
no eating or drinking
No leaks
no leaks
no leaks
no leaks when you leave loading area
no manure leaking off hoses or tank
no passengers
no phone usage on road
no sharp turns
no smart phone
no spills
no spills
no telephone
no texting
no texting/driving
not to overload tractor
not under the influence of alcohol
number to call if a spill
obey all laws
obey all road signs
obey all traffic signs
obey laws
obey laws
obey speed and traffic signs
obey speed limits
obey traffic laws
Obey traffic laws
obey traffic laws
obey traffic signs
obey traffic signs
obey weight limits
observe
observe all traffic
observe bridge weight limits
observe load limits
observe weight limits
observe weight limits,
one thing at a time
One trip
only 3 implements in total
only 3 pieces of equipment
only allowed one power unit with 2 implements
only can take half the roadway
only go speed your comfortable with
only take up 1/2 of the road
operate at safe speeds according to ratings
operate in a safe manner
Other drivers (non farm mostly)
overall weight
overload bridges (all axles)
park in field
Pay attention
pay attention
pay attention
pay attention

pay attention
pay attention
pay attention
pay attention
pay attention
pay attention
pay attention
pay attention
pay attention
pay attention
pay attention
pay attention
pay attention on vehicles on the road
pay attention to all of your surroundings
pay attention to bridges
pay attention to surroundings
pay attention to water inlets, water sources and homes
pay attention to your surroundings
pay attention when on road
people don't pay attention to tractors
permits
personal safety
phone in pocket
plan ahead
practice good safety
pre-trip inspection
pre-trip inspection
pre-trip inspection
pre-trip inspection
pre-trip inspection
pre-trip inspection
pretrip
pretrip - tires, equipment
pretrip inspection
pretrip inspection
pretrip inspection
pretrip inspection
pretrip inspection
pretrip inspection
pretrip inspection
pretrip inspection
pretrip inspection
pretrip inspection
pretrip inspections
pretrip inspections
pretrip route
procedure of traveling on road
proper knowledge of equipment
proper lighting
proper lighting
proper lights
proper lights on
proper maintenance
proper markings
proper signage
proper signage
proper towing of implements
properly couple equipment
public safety
put cell phone away
put chains on
put lights on
put your phone down
record how much you put per acre
record manure per acre
red light to back 500 feet visible
registration - vehicle
Release - fail to report
remember you have a load behind you
report release
Report spills immediately
report spills immediately
report spills immediately
reporting protocol
required lights
required signage
respect the weight
ride with employee the few loads
Righy of way
road conditions and type of road
road travel 50% to be used, 50% you leave open
Rules
run lights and flashers
ruts
safe equipment

safe turning
safetly
safety
safety
safety
safety
safety
safety
safety
safety
safety
safety chain
safety chain attaced to truck/SUV
safety chain if towed by licensed cert
safety chains
safety chains
Safety chains
safety chains
Safety chains
safety chains
safety chains attached
safety chanins hooked up
safety first
Safety first
safety first
safety inspections
safety of those around them
scale
secure attachements
secure equipment
secure load
secure load
secure load
secure load
secure load
secure load
Secure load
secure load
separation distances
separation distances and land requirements
separation distances from bodies of water
separation distances review
set mirrors
share the road
share the road
share the road
share the road on hills
signage on equipment
signal
signal early
signs
signs
signs on equipment
sleep if tired
Slow
slow
slow
slow
slow < 35 mph
slow acceleration
slow acceleration
slow and steady
slow and steady
slow around corners
slow dow gradually before turning corner and turn slow
slow down
slow down
slow down
slow down
slow down
slow down
slow down
slow down
slow down
slow down
slow down
slow down
slow down
Slow down
slow down
slow down
Slow down
slow down
slow down
slow down

slow down
slow down
slow down
slow down a lot before a turn
slow down before time
slow down early
slow down for corners
slow down for intersections
slow down for traffic
slow down in dust
slow down in plenty of time when turning
slow down or stop for on compin traffic.
slow down plenty on turns
slow down slowly
slow down when hauling on major roads
slow moving vehicle sign
slow moving vehicle sign
slow moving vehicle sign
slow speed
slow stops
slow stops
SMV if applicable
SMV sign
SMV sign
SMV sign
SMV sign
SMV sign
SMV sign
SMV sign
SMV sign
SMV sign
SMV sign
SMV sign
SMV sign
SMV sign below 35 mph, not above 35
SMV sign required for vehicle going less than 35 mph
SMV signs
SMV signs
SMV signs
SMV signs
SMV signs
SMV signs
SMV signs
SMV signs
SMV signs
SMV signs
SMV signs
SMV signs
SMV signs
SMV signs
SMV signs
SMV signs
SMV signs
SMV signs
SMV signs
SMV signs
SMV signs and lights
Soft shoulders
Soft shoulders
soil conditions, apply less in wet area
speed
speed
speed
speed
speed
speed
speed
speed
Speed
speed
speed
speed
speed
speed
speed
Speed
speed - slow down
Speed - SMV signs
speed <35 mph
speed down the road
speed for conditions
speed of equipment
Speed top 35
speed up gradually
speed up slowly
spills

start slow
stay alert
stay alert
stay awake
Stay awake
stay awake
stay away from edge of the road
stay away from houses
stay away from houses/buildings
stay away from shoulders
stay away from water
stay below 96,000 lbs
stay in contact with other haulers
stay in middle of the road
stay in the middle of the road
stay in your lane
stay observant toward manure spill
stay off paved roads if possible
stay off state roads
stay off yellow line
stay off your phone
stay off your phone
stay off your phone
stay off your phone while driving down the road
Stay on the road
stay on your 1/2 of the road
stay on your side of the road
stay on your side of the road
stay on your side of the road
stay to middle of gravel roads
stay under 35 mph
stay under 35 mph speed limit for field implements
stay under 96,000 lbs
stop and look
stop fully
stop immediately if a spill occurs
stop immediately if anything goes wrong
Stop signs
stop to meet oncoming traffic
strap down loose equipment
strap things down
strap when needed
straps
take corners slow
take it easy
take it slow
take it slow
take it slow until familiar with equipment
Take it slow until you are comfortable with the tractor and tank
take their time
take time
Take time/slow
Take time/slow
Take your time
Take your time
Take your time
take your time
take your time
take your time
take your time
take your time
take your time
take your time
take your time
take your time
take your time
take your time
take your time
take your time
take your time
take your time
take your time
Take your time
take your time and try to use your brain
take your time to get used to how the vehicle handles certain conditions
Take your time, be careful
tarp it
tarp load
Tarp load
tarp loads if necessary
tarp the load
teach new people to share 1/2 the road
tell me if there is a spill
tell separation distances
tell them how much weight they are hauling, drive slow

the width of the implement
there is a lot of weight behind you so pay attention
Think
think and pay attention
think and slow down
think safety first
tie stuff down
tire pressure
Tire speed rating
tires
tires
Tires will be slick
total weight
traffic
traffic pattern and type of traffic
trailers in good shape
travel at a safe/comfortable speed
travel safe speeds
travel safe speeds
truck in good shape
Turn all road lights on at dark
turn corners slowly
turn hydraulic steering off on tanks
turn lights on
turn lights on
turn on flashers
turn on lights
turn PTO off
turn pTO off
turn signals
turn slowly
Turn warning lights on during day
turn your hazards on
turning
update management plan to reflect surface application rate
use all your lights
use appropriate speed
use blinkers
use brakes
use caution
use caution
use caution
use caution lights
use caution lights
use common sense
use common sense
use common sense
use common sense
use common sense
use common sense
Use correct lighting
use flashers
use flashers
use flashing lights
use flashing lights
use hazard lights
use hazard lights
use hazards and signals
use lights
use lights
use lights
use lights and signals
use lights and turn signals
use lights and turning signals
use lights, signs
use lights, white, amber & red
use no more than 1/2 the roadway
use of safety chains
use proper lighting and signage
use safety chains
use SMV sign
use your
Use your head
use your head piece
use your mirrors
value manure
valve leaking
valves closed
valves work
vehicle check
vehicle inspection
vehicle weight
very heavy
violations
wait at intersection if car is coming down the road

wait for traffic
wait for traffic
watch bridge laws
watch bridge weights
watch corners
watch for cars
watch for cars
watch for cars
watch for hazards ahead and behind you
watch for inattentive drives
Watch for leaks
watch for oncoming/other traffic
watch for other people
watch for other traffic
watch for others
watch for soft shoulders
watch for traffic
watch for traffic
watch for traffice because they don't always watch for you
watch idiots driving
watch old bridges
watch out for other drivers/distracted drivers
watch out for other/distracted drivers
Watch out for others
watch out for others
watch out for stupid people
watch out for the other guy
watch speed
watch speed
watch the ditch
watch the soft shoulders on gravel roads
watch weather
watch weight limit on bridges
watch weight limits
Watch weight limits on bridges.
watch weights
watch what you are doing
wather for vehicles
we've got all day to be careful and do it right
wear seat belt
weather
weather
weather conditions and time of day
weigh load
weigh load
weight
weight
Weight
weight
weight
weight
weight
weight
weight
Weight is based on front to back axles
weight limit
Weight limit
weight limits
weight limits
weight limits
weight limits
weight limits
weight limits
weight limits
weight limits
weight of equipment on road
weight of load
weight on axel
weights of loads - on roads/bridges
when meeting a car pull over if possible
which route do I take loaded or empty
white light front, amber and red on back
Wide turns
Wide turns, check mirrors
width
width
width
width
width
width
width of implement
will the equipment meet safety standards?
windows
working brakes
working lights

working lights
working lights
working lights
yield
yield
yield 1/2 of road
yield 1/2 of road
yield 1/2 of road way
yield 1/2 of roadway
yield 1/2 of roadway
yield 1/2 of the roadway
yield 1/2 of the roadway
yield 1/2 of the roadway
yield 1/2 of the roadway to other cars
yield 1/2 road
yield 1/2 road
yield 1/2 road
yield 1/2 road
yield 1/2 road way
yield 1/2 roadway to others
yield 1/2 the road
yield roadways
yield to all signs
yield to cars
yield to cars and trucks
yield to other people
yield to other traffice
yield to traffic
yield to traffic
you are big and heavy, they don't stop fast
you can't stop fast
you have 1/2 the road
you weigh more than them
your turning signals doesn't mean they will see them

13. Is there a topic you jwold like to hear about during next year's training?
additives
agitation information
all info was great
all was good
always good
Amount of agitation required for pits
any good manure test plot info
anything Is good
application equipment
application rates, equipment benefits, how to make it easier to pump manure - real life scenarios
are deep pit manure gases becoming more of a problem than they used to be?
beef grazing in cover crop systems
best manure rate
best type of equipment to use
Can I legally empty human septic tank from house/barn/shed myself and apply it as hog manure
carbon credits, carbon issues, future of selling carbon credits and its value
clean up of spills, shorten the film to 1 hour only - 2 hours is too much info
commercial vs private hauling
compaction effects fall vs spring
compaction issues from tanks
compaction to ground wet vs dry
comparing sidedress with manure
comparison of different cover crops - oat, rye
Composting
Composting
composting, wet dry feeders vs dry feeders, waterers
confinement site/pit safety
consistent manure application on injection systems
continue cover crop, nitrogen values and timing
cost per acre for seed for rye
cover crop
cover crop
cover crop
cover crop application timing
cover crop techniques
cover crop, nutrients, timing
cover crops
cover crops
cover crops
cover crops for corn on corn or other N solutions
data on top broadcast vs incorporation
date about dairy manure
DDGS and foaming
dealing with wet conditions
difference between farm application and commercial application
difference between personal/family farm application and commercial applicators
difference between personal/family farm application and commercial applicators
different types of application equipment
distributor boxes and iff they are equal applying
distributor effectiveness
dollar value on manure
DOT discussion was very good
DOT information
DOT information renewals and updates along with DNR
DOT was good
dragline vs tank, compaction concerns
dry manure
early manure applied in fall with Instinct and cover crop together
effect of Instinct at low and high rates in manure in early fall, late fall and spring application
examples
farmers breaking bridge limits
fertilizer value of manure
foam control, pit treatments, tank treatments
foaming
foaming in pits
Frozen soil and snow covered soil specific restrictions for application (ex: blocking intake)
great job
Handling adverse eather, research on snow covered ground
Has the DNR considered using some of our money to fund an advertising campaign to educate the public on the great job we are doing using manure to grow food?
hauling chicken manure
have meetings in morning (Calhoun Co)
hemp and top application numbers
how cover crops increase earning potentials if any, what are consumer's demanding
how electric capacitor works
How much effect can the use of bioreactors have on nitrates in our water?
hydrogen sulfide gas danger, pasture management application in August
hydrogen sulfide information
hydrogen sulfide information
I was satisfied with the information provided
I would like to hear more about nutrient values of manure and different manure rates for different livestock
Instinct - 35 late fall, early spring, 70 early fall
it would be interesting to see a test between yield difference in drag line and tank application
just more data on nutrient content of manure an dimpact on yields
keep cover crops an an important part of the training

less cover crop talk, less on violation and separation distances, make it for applicators and not just owners/agrononmists, too techical/monotonous
Liked the information on the research farms
livestock manure is regulated more, where crop farmers can apply how much fertilizer they want; only limiting factor is economics still runs off with snow melt!
loved cover crop information. Would like to continue to get more infomraiton on how to keep nitrates out of our rivers and streams
manifold testing - was good in the past
manure additives
manure additives
manure additives
manure additives - comparisons between different modes; stabilizers - good vs bad, do they slow down N breakdown too much; effects of additives and stabilizers on H2S
manure additives - what works, what doesn't, odor, nitrogen fixation, cost
manure and compaction damage
manure foaming
manure on alfalfa
manure safety
methane gas build up and foaming
monitors for hydrogen sulfide, methane
more about DOT requirements
more about dry manure
more cover crop
more cover crop and manure, early fall application with Instinct, manure and pastures
more cover crop info and nitrogen update
more cover crops and opportunities there
More data on nutrient leaching
more follow up on cover crop
more from DOT on regulations
more info on manure management and cover crops, application rates, growth stages of cover crops, etc.
more information on cover crops. I think it is something we all need to do.
more instinct facts
more manure test plots. Very informative!
more on bed pack manure
more on cattle or dry manure, more pictures or video to show effects of mistakes or what to do right
more on cover crop and when nitrogen from cover crop is available
more on cover crop research
more on cover crops
more on cover crops and how to get a stand established prior to winter
more on cover crops and manure
more on DOT violations
more on manure and cover crops
more on timing vs cover crops
more pictures of "whoops" scenarios
more than manure/pit stop
more timing and cover crop data, stockpiling and composting dry manure
more yield data
more yield data, more cover crop info
Most informative video yet
move cover crop information
move cover crops that are studies on a year-to-year not over to the next because weather has a big effect on yields
N Inhibitors effect on timing of manure application
nitrogen utilization
no, covered well
no, everything I wanted to hear was covered.
nope well covered
not cover crop
oats as cover crop, as compared to rye or turnips. Economic comparison, not just yield on application dates, rates, use of stabilizers
options to getting rid of manure or moving it effectively long distances
organic nitrogen
picture of proper manure application
pit additives
pit additives and nitrogen stabilizers in manure
pit agitation methods
pit agitation methods - lagoon pumps vs boats, pros and cons with expense analysis
pit foaming remedies
Pit sampling procedures, test before applicator or during?
price and results of pit additives
really liked the DOT information
reduction of pit fumes, best additives for solids
same as this year
side dress yield data, examples of low rate dragline systems (farmer sized)
side dressing manure in corn, ways to do it without crop damage
sidedress
sidedressing results
situation with Des Moines water treatment plant
soil compaction
spills
spreading manure in spring - on top or injection
stabilizers
This is probably one of the more interesting/informative session put together to date! Well done, Dan!
tool bars
turkey/dry manure
update on cover crop research and possible spring application ideas and methods
update on H2S monitors
using hog manure on pasture grassing to increase stocking rate for cattle
what are the fines for different violations
what are the punisments/penalties/fines for violations - scare tactics into following rules
what causes pit foaming

what is the nutrient requirement of row crops - latest research on this
what state is cover crop destroyed
whatever you decide, I will listen
worker safety, pig safety
yield with manure timing