uses GSB?	Question: "For managers - How does growing season fire fit your desired outcomes and management objectives?"	Remnant vegetation?	Key words
y	1. To better kill some target species. 2. For restoration purposes fire history research has shown a even distribution of growing season an dormant season fires historically in my area.	not noted	invasive species; historical evidence for it
y	Burns during May to impact Smooth Brome. Also, simply rotating burn seasons so as to not repeatedly impact the same set of species (typically low-growing, early-season forbs and native cool-season graminoids (Koerleria, Stipa, Carex, etc.as in "traditional" spring burns in March/April).	not noted	seasonal diveristy = diversity of fire effects
y	Efficient management of succession by having a greater impact on woody species. Diversity begets diversity. Understanding that burns in any habitat did not historically take place within the small burn windows in the spring and fall that are recommended for SW Michigan, and changes in the timing of a burn elicits differing responses from plant communities, the structure of the plant community and the species richness and abundance should become more diverse within a landscape relative to adjacent burn units within the mosaic. This is a facet of our diverse and integrated management.	not noted	seasonal diveristy = diversity of fire effects
y	Expanding burn window/allow us to get more fire on the ground, increased fire effects on encroaching brush, reduce dominance of cool season grasses, Promote diversity in restorations that haven't seen fire in a long time.	reconstructions	expand burn window
y	Fits somewhat. We've used it (most recently in June 2014) to set back large infestations of second-year sweet clover plants. Are interested in potentially using it more for control of native clonal woody species (e.g. gray dogwood, smooth sumac, trembling aspen, etc.) but have not done so up to now.	not noted	invasive species
y	For one it allows for a different vegetative structure that favors many of the forb species. It also has benefits to woody vegetation control. It also allows some cover to be left for some winter cover.	not noted	vegetative structure; habitat for wildlife; reduce woody species
y	For us growing season fires are about trying to control non-natives in the spring (spotted knapweed, cool season grasses, etc.) in the fall we think of it as a way to better control shrubs since they would not be able to get all of the nutrition down to their roots as well as a way to knock back prairies that are being dominated by warm season grasses.	not noted	invasive species; reduce C4 grasses

uses GSB?	Question: "For managers - How does growing season fire fit your desired outcomes and management objectives?"	Remnant vegetation?	Key words
y	Growing season burns seem to favor some native forb species depending on timing, and extends the window in which I can conduct prescribed fires. I feel from historical evidence that at least some fire occurred in my area during the growing season, so this helps mimic pre-settlement fire conditions.	not noted	favor native species; expand burn window; historical evidence for it
y	Growing season burns, when conducted properly, can achieve objectives that dormant season burns are unable to. Primarily, my objective is to improve habitat conditions for open grassland species.	not noted	habitat for wildlife
y	Growing season prescribed fire allows us to actively manage stands of native warm season grass that are essentially "overstocked", dense, and undesirable for the species of grassland wildlife that we wish to promote. Growing season burns also allow us to control invasive species in our meadows in a meaningful way and reduce woody undesirables significantly.	reconstructions	invasive species; reduce C4 grasses; reduce woody species
y	GSB (growing season burns) seem to help control woody encroachment in prairie restorations better than dormant season. With the correct timing and conditions we have used GSB as a tool to help manage exotic sericea lespedeza.	reconstructions	invasive species; Sericea lespedeza; woody species
y	I generally oppose growing season fire but have been involved in some through my career. Justification would involve decreasing vigor of tall grasses, boosting forbs (especially spring flora) and killing trees.	not noted	reduce C4 grasses; kill woody species
y	I wish to reduce the over abundance of native grass and enhance the forb component. Most native grass plantings on IDNR were planted to heavy to native grass or have become too grass dominate due to dormant season burning. This structure is not conducive to management of those species that depend on forb rich plants for nectaring, egg laying, or brooding (whatever species it may be - herps, birds, insects, etc.). Also more effective control of invasive and/or exotic woody species.	reconstructions	reduce C4 grasses; habitat for wildlife ("nectaring, egg laying, brooding") ; reduce invasives; reduce woody species
y	Increase # of burn days; get more burns done, more acres burned. Possibly better match historic fire regime? Better control of invasive spp Better control of undesirable woody spp	not noted	expand burn window; reduce invasive species; reduce woody species; historical evidence for it (?)
y	It allows us to extend our burn season first of all, and also to meet some specific management goals. These goals include brush and invasive species reduction. We also use it as part of a patch burn grazing regime so we burn the next patch when the bison move off the last burned patch. We do this regardless of the season.	not noted	expand burn window; reduce invasive species; reduce woody species;

uses GSB?	Question: "For managers - How does growing season fire fit your desired outcomes and management objectives?"	Remnant vegetation?	Key words
y	My experience is very limited but September growing season fire is excellent at "controlling" invasive brush. May burns are good but not as effective at brush control.	not noted	reducing woody species
y	stil exploring for certain. but it seems to fit particularly well for invasives control in places that there are few conservative species. it also works well in high fuel loading circumstances when dormant season burns are more volatile. there is still caution and concern (and lack of research) as to if and how growing season burns are detrimental to conservative native species both plants and animals. so being conservative on sites where managemnet goals are focuses on sensitive species.	reconstructions?	reduce invasive species; fire behavior; not using where there are sensitive/conservative species
y	We are currently using summer growing burns to help knock back brush in our grasslands. We typically over achieve our burn objectives that are written into our plans when we conduct a growing season burn versus a dormant season burn. This next summer we will be looking to use prescribed fire in the summer in some old, dense, thick, grass dominated prairie plantings to bring back some of the diversity.	reconstructions	reduce woody species; reduce C4 grass dominance
y	We are experimenting with growing season fire to enhance forb abundance in a grass dominated prairie.	not noted	enhance forb dominance
n	I never use growing season fire.	not applicable	
n	In terms of the quality, integrity and stability of the intact natural systems that I manage or monitor, it is in direct opposition to desired outcomes and management objective.	not applicable	intact natural system
n	It doesn't. We feel it has too many deleterious effects in a highly fragmented and altered landscape. We burn in the dormant season.	not applicable	highly fragmented and altered landscape
n	Not sure if it fits at this time.	not applicable	
n	Personally I don't know, but suspect people do these because they believe they will accelerate the restoration of their sites, with the objectives including a more open over/understory, fewer invasives, greater native community species representation, and greater site diversity.	not applicable	

#	Question: "For managers, what questions would you like research to address to support making decisions about burn timing?"	Key words
1	research should look at timing as it applies to intactness and quality of sites and should include direct hypotheses questioning impacts on vertebrate species	wildlife - vertebrate species
2	response of sensitive fauna	wildlife - sensitive species
3	With management one always observes the benefits of a successful management strategy, such as prairie chickens using our summer burn units, but observations are not the same as data supporting the decisions to conduct these novel management actions.	wildlife - prairie chickens use summer burn units
4	In my world, research would serve me best by determining how do growing season fires influence the recovery of listed species.	wildlife - listed species
5	What deleterious effects are there on invertebrates that synchronize their life cycle with the phenology of specific plant genera?	wildlife - invertebrates
6	Additionally, I think it is important to research the impacts of summer fire on invertebrates.	wildlife - insects
7	I would like researchers to address microhabitat and landscape effects of growing season burns in relation to grassland-dependent birds and wildlife.	wildlife - habitat
8	In my world, research would serve me best by determining what suites of grassland birds respond to growing season fires,	wildlife - grassland birds
9	What are effects on animal species (herps, birds, insects, etc). This is the one issue that continues to come up. I am talking about direct fire mortality AND the response these animals have to areas that have been subject to growing season burns.	wildlife - direct and indirect impacts
10	research should look at timing as it applies to intactness and quality of sites and should include direct hypotheses questioning impacts on invertebrate species	wildlife - vertebrates
11	reptile and amphibian impact	wildlife - herpetiles
12	impact on wildife in midwest	wildlife
13	How do burns in various seasons affect insect populations, particularly species of conservation concern?	wildife - insects
14	I think managers need better prescription guidance so fall burns are conducted when rx are low enough and winds are high enough, and drying is good but stil get that good mosaic effect	weather parameters

#	Question: "For managers, what questions would you like research to address to support making decisions about burn timing?"	Key words
15	Also, more talk about acceptable weather parameters for growning season burns	weather parameters
16	Is there better brush kill, grass control, and greater native plant community species representation? Conversely, what are the biological costs? Are you knocking back desirable native species? And if so, is it a fair trade-off (i.e., its a net gain)?	trade-offs
17	Effects on target and non-target species. Does the "good" outweigh the "bad?"	tradeoffs
18	Are these growing season fires having these effects that I described above or are we just seeing short term benefits?	short term impacts or long term outcomes?
19	In my world, research would serve me best by determining what assemblages of organisms increase or decrease with a growing season fire rotational strategy.	rotational implementation of growing season burns
20	Many questions remain unexplored regarding the suitability of growing season burning. Results appear to vary widely between natural and artificial systems in addition to timing.	results in natural and artificial systems
21	What is the plant community response to such burns? How much does it reduce grass or enhance forbs? How long till the response is noticeable? What burn regime gets to the desired grass reduction/forb increase? What is the various results of timing of growing season burns to plant community response? What combination of growing season burns and dormant season burns gives the best results to maintain forb rich/grass poor native plantings?	plant community; forbs; grass:forb ratios
22	Questions regarding richness and Simpson's diversity are inadequate without qualifying variables like indices of conservatism which provide a platform to interpret the integrity of system change	plant community integrity
23	Quantify impacts to woody spp vs dormant season	plant community - woody species
24	How effective is growing season burning alone of control of invasive and exotic woody species?	plant community - woody species
25	What are the significant factors that limit growing season burn effects on woody species?	plant community - woody species
26	Best time for control of species such as Serecia Lespedeza as well as other herbaceous exotics.	plant community - timing to kill invasive forbs

#	Question: "For managers, what questions would you like research to address to support making decisions about burn timing?"	Key words
27	effects on certain species with different burn dates. sericea lespedeza, goldenrod, autumn olive, other woodies.	plant community - impacts on invasive forbs; impacts on brush
28	determine impacts (immediate and one year later) on herbaceous and woody species.	plant community - impacts on brush; impacts on herbaceous species
29	Forb versus Grass Impact	plant community - forb:grass ratios
30	What evidence exists to support common perception that growing season burns enhance forb community (as opposed to being neutral or enhancing tall grasses)?	plant community - forb response
31	Also effects on native/desired plants	plant community - desired plants
32	more about native veg response to growing season burns	plant community
33	What negative impacts do growing season burns have and what is the likelihood that the flora/fauna affected will recover?	plant community
34	Effect of growing season burns on a number of native plant species or genera, either favoring or hindering.	plant community
35	research should look at timing as it applies to intactness and quality of sites and should include direct hypotheses questioning impacts on vascular plant species	plant community
36	Information about wildlife species who are most at risk from rx in spring. I think of amphibians and reptiles as well as certain bird species where disruption of nesting of one nesting event can severly impact reproduction.	parameters; what cues are important?
37	Is there an ideal fuel moisture/RH to be targeting for these types of growing season burns?	parameters
38	Desired RH to maximize burn start times for different results	parameters
39	What range of parameters (e.g. temp, humidity, fuel moisture, etc.) makes for effective burns?	parameters
40	Rx's for growing season burns - what conditions can you get different fuel types to burn effectively?	parameters
41	While often doubted, could lightning strikes cause prescribed fires in areas like central Illinois (fire moving from woodlands to prairies perhaps?)	lightning

#	Question: "For managers, what questions would you like research to address to support making decisions about burn timing?"	Key words
42	I think managers need suggested prescription re timing in spring so not to have unintended impacts, such as information about prewarming fuels with high night time temperature over days preceding, rh and winds of course, and phenology of spring budding on over story trees. I think by 'accident' we have done spring growing seaosn burns with pretty intensive fires which killed overstory trees.	intensity higher than anticipated
43	How common were growing season burns before European settlement? Did native peoples use growing season burns?	historical burn regime
44	response of high conservation value species	high conservation value species
45	As one GS burn obviously get the results, what frequency and fire intensity are suggested (over how long) to see impact	frequency
46	Compare annual dormant season burn results with periodic burns during any season.	dormant vs growing season comparison
47	While it would appear that we have an opportunity to expand our burn window based on ambient conditions, many of suspect that this opportunity is overstated given the many other variables that play a part in creating fruitful burn conditions - how many more burns can we actually pull off given all of the combined factors	burn windows - how much is the burn window actually expanded?
48	Is it appropriate for oak savannas? if so, which type?	appropriate for oak savanna?