

Results of the MIPN Research Needs Survey

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In 2006, the MIPN Research Committee conducted a web-based survey to help prioritize research needs and improve interactions between land managers and researchers working to manage invasive plants in the Midwest. The survey was designed for “surveymonkey.com” and potential respondents were solicited from list-servs and contact lists targeting university, government, and other researchers, as well as public and private land managers.

We received 192 responses, 27% from people who identified themselves as researchers, 50% from people who identified themselves as managers, and 23 % from people who identified themselves as ‘other.’ The ‘other’ responses are ignored for the purposes of this report.

Both researchers and managers responded that it is important that they work together, with none of the respondents describing this as “low” in importance. Neither group rated the current level of cooperation as particularly high, with over 90% of both groups rating current cooperation as “low” or “medium.” This result was highlighted in the question “With whom do you currently work...” Eighty-nine percent of researchers indicated that they work with researchers and 82% of managers indicated that they work with other managers on invasive plant issues. Managers indicated substantially more interaction with the general public (79% vs 42%) and researchers, predictably, work more closely with students (78% vs 46%).

So what keeps researchers and land managers from working more closely together on invasive plant issues? Predictably, perhaps, “lack of time” and “lack of money” were the main issues indicated, although “lack of money” was of more importance to researchers (78 vs 60%) whereas “lack of time” was more important to land managers (60 vs 42%). A hopeful sign is that few in either group indicated a lack of interest in the others’ issues to be a reason for not working together. Other possible constraints that might be difficult to overcome, such as a “language barrier” or “lack of knowledge or skills” did not rank high in importance for either group.

What can be done to help researchers and land managers to work more effectively together? Both groups seemed to favor opportunities to develop researcher projects at land managers’ sites, with funding from some cooperative grant program. Land managers also ranked “demonstration/research field trials” as a good opportunity for interaction. Neither group indicated a need to educate the other group in their issues, which is an indicator of respect for what the other has to offer. In the open-ended response section, there was an overwhelming response from land managers, offering field sites for experimentation. These results suggest that on-site experimentation and demonstration of management methods would be a primary way for researchers and land managers to begin to interact more effectively.

However, researchers and land managers did not always agree on the type of research of interest. For example, researchers judged basic biology, dispersal methods, causes of invasion and site characteristics favoring invasion as more important areas for research than did land managers (average 63 vs 42%). Most interesting from a researcher’s perspective was that neither group judged “test theories of invasion” as a high priority (especially land managers) even though many papers have been published in this area under the context of a “dilemma” requiring explanation. Neither group rated “impact of land use on invasion” as very important even though national research programs have included this language in their requests for proposals. Nor did either group rank “social/political factors” or “risk assessment” as very important, even though numerous studies have demonstrated an undeniably strong human component in the introduction and spread of invasive plants. Both groups rated “control recommendations” and “restoration methods” highly, which coincides well with the idea of conducting joint research and demonstration sites. Land managers were more interested in rapid response programs than were researchers (73 vs 57%) although researchers favored early detection by about 10%.

In summary, this was a preliminary survey of researchers and land managers, with a response that is probably representative of both groups. Results suggest that both groups view invasive plant research positively and – more importantly – they view each other positively. Results indicate that there are excellent opportunities for researchers to make use of sites for studies on land that land managers control. Those seeking to increase interaction between these groups should pursue this opportunity with respect to developing and demonstrating control recommendations.

Responses to specific questions were as follows:

Respondents self-identified as:

Researcher	51
Manager	96
Other	45
Total responses	192

How important is it for researchers and land managers to work together on invasive plant issues?

	<u>Researchers</u>	<u>Managers</u>
	%	%
Low importance	0	0
Medium importance	8	4
High importance	92	96

How well are researchers and land managers currently working together?

	<u>Researchers</u>	<u>Managers</u>
	%	%
Low cooperation	45	36
Medium cooperation	47	54

High cooperation 8 10

What types of invasive plant research are most important?

	<u>Researchers</u>	<u>Managers</u>
	% rated 'High'	
Basic biology	65	53
Test theories of invasion	40	17
Dispersal methods	63	43
Methods to prevent invasion	69	72
Traits of invasive plants	53	38
Interrelated causes of invasion	60	34
Maps of invasive plant distribution	47	47
Environmental impacts	66	69
Economic impacts	47	44
Benefits of management	28	46
Public perception of invasives	21	27
Site characteristics favoring invasion	63	38
Control recommendations	73	89
Restoration methods	71	67
Impact of land use on invasion	29	14
Social/political factors	26	15
Risk assessment models	28	19
Early detection methods	73	63
Rapid response plans	57	73

With whom do you work on IP issues?

<u>Collaborators</u>	<u>Researcher</u>	<u>Manager</u>
	% of respondents	
The public	42	79
Educators	47	37
Students	78	46
Commercial operations	20	26
Land managers	67	82
Researchers	89	42

What could be done to help researchers & land managers work together?

	<u>Researcher</u>	<u>Manager</u>
	% rated 'High'	
Research projects at land manager's sites	81	62
Land manager-initiated research projects	46	47
Regional cooperative projects	69	58
Demo/research field trials	53	63
Train land managers in research methods	29	19
Educate researchers in land manager issues	49	57

State/regional tours	21	28
Conferences for researchers & managers	55	47
Cooperative grant program	75	57

Researchers: What obstacles prevent you from working with land managers?

Managers: What obstacles prevent you from working with researchers?

<u>Obstacles</u>	<u>Researcher</u>	<u>Manager</u>
	% rated 'High'	
Lack of time	42	60
Lack of money	78	60
Language barrier	12	5
Agency constraints	29	23
Lack of knowledge/skills	10	9
Lack of interest in others' issues	2	5
Lack of suitable sites	10	7
Lack of contact with managers/researchers	21	38

Researchers: How could land managers help you in your research? (open responses)

Make their needs known to researchers.

Report invasive species occurrences.

Communicate about appropriate funding opportunities.

Take time to talk about what is happening out on their site, and what their ideas about the research are.

Provide practical suggestions.

Keep consistent management and records from year to year.

They already help greatly. (6)

Managers: What resources can you offer researchers? (open responses)

Field sites for experimentation (>50)

Specific species, habitats etc

Volunteer and other personnel.

Management history, site data, maps etc