

CAWS Oration

Sustained control of plant invaders requires our sustained public outreach

Richard N. Mack

School of Biological Sciences, Washington State University, Pullman, WA 99164, USA
(rmack@wsu.edu)

Summary Plant invasions continue to exact a huge environmental and economic toll worldwide. Consequently, sustaining the control of these pests as well as limiting the spread of potentially invasive plants would seem topics of accepted public policy. They are however anything but permanent, the consequences of several social forces. With so many policy issues constantly competing for the public's attention within a flood of other information, the control of invasive species runs the risk of being overlooked. Increased demands on public funds, which are often static or even shrinking, provide a further threat to the continuation of sound practices. Furthermore, calls are increasing to relax expensive control efforts against some potentially invasive species or to view some invaders as beneficial in their new ranges. Given the stakes ultimately involved if the introduction and spread of damaging non-native species are to be unchecked, we must ensure the public receives information about invasive species that is accurate, comprehensive and timely. Taking every opportunity to discuss the consequences of invasive species (and the need for their sustained control) in all public forums now becomes an important task for us all. Shirking this obligation ensures that science-based best practices will not only be weakened but even suspended – a sad legacy to bequeath future generations.

Keywords Constituents, elected officials, honest brokers, outreach, the press.

INTRODUCTION

The origin of our shared problems with plant invaders (or invasive plants)¹ and what I contend are our shared solutions in dealing with them ultimately distil to different forms of transfer. On the one hand, we witness the transfer (more commonly termed transport, dispersal, emigration, spread) of organisms from a donor (often native) range to new, recipient range(s). We, weed warriors (i.e., all of us who share a commitment to minimizing the introduction, spread and consequences of plant invaders), productively spend our careers in the detection, documentation, experimentation and mitigation of these transfers of non-native species into and within new ranges. But society does not gain full value from our efforts because we have not been as actively engaged as needed in the transfer of this

information to the public. Although an old bromide, it is nonetheless true that, 'you cannot make good decisions, if you do not have good information'. To enact sound policy, the public needs and deserves not just good but the best current information about invasive plants and the rationale and means for their detection and control. We are collectively the most informed, unbiased resource from whom the public can draw advice about these chronic threats.

Explaining our concern about invasive plants starts with some intrinsic advantages. Terms, such as 'invasion', 'incursion', 'noxious weed', are readily perceived by all as pertaining to detrimental species and events. Furthermore, many people directly experience the consequences of invasive plants (e.g. poisoned livestock, reduced forage yields, uncontrolled fires, impeded waterways). Many others have not however been given the opportunity to make an informed opinion about species that negatively affect economics, the environment and even public health – a missed opportunity for which we share responsibility.

Our continual need to press the case for sustained broad-based public action against invasive plants has become increasingly important, as a function of at least three aspects of our everyday lives. Admittedly, they vary in their ability to stymie public action, but all three should be addressed in the information and recommendations we provide to the public.

Footnote

¹ I use 'plant invader' to refer to non-native species that not only persist but also become prolific, spread and wreak environmental damage in their new range(s) (*sensu* Mack *et al.* 2000). This term best equates to 'noxious weeds', a useful term with broad public recognition. My comments also address a larger, more loosely named group of non-native species that may well be locally damaging (broad-sense 'weeds') but may not have fully expressed their influence and extent in a new range. This latter group includes 'sleeping weeds' (Groves 1999) – a cleverly-coined term that immediately points out that we deal with phenomena that may be fully expressed only after decades.

- I) The sheer volume of news – all forms and on all conceivable topics – has never been greater. Society is awash in information, so a message about invasive plants bobs along in the same flood of news that ranges from the profound to the profane. Information overload is a daily hazard.
- II) Increasing demands are placed on limited (and often shrinking) public funds; priorities must be set, but governments do not always allocate funds in direct proportion to the severity of a societal problem.
- III) A contention persists, even among some ecologists, that invasive species deserve a revisionist assessment, i.e., that many of these species cause no (detectable) harm and that some even provide ecosystem services (e.g. pollination, N-Fixation) (cf. Davis *et al.* 2011, Simberloff *et al.* 2011) – a view that would be happily endorsed by others, who see regulations and control efforts for confirmed and potential pests as simply impediments to their business (e.g. Scott 2010).

One point is certain: the transfer of potentially damaging non-native plants to new ranges will continue. The uncertainty resides in what action society will take in response. These challenges and others to public awareness reinforce the notion that an ‘all hands on deck’ approach among weed warriors is needed, if we are to not only sustain hard-won control programs, but also build more effective and comprehensive prevention, interdiction and control practices in the future. How then can we with varied backgrounds better serve society in making sound decisions on these phenomena? I outline below a brief assembly of best practices that I attempt to use in getting the message transferred, i.e., broadcast, to the public – a culmination of my learning on the job (and too commonly ‘on the fly’) and more important the lessons and wisdom gleaned from others, who practice outreach at the local level, in the press, and by meeting with elected officials in Canberra and Washington, DC.

MODES OF OUTREACH: ALL ARE IMPORTANT

Civic groups: outreach at the local level Many of us are members of organizations that promote widely shared civic goals in a relaxed, convivial atmosphere (e.g., Rotary International, Kiwanis International). Others are members of hunting, fishing or gardening clubs. Many of these organizations hold regularly scheduled meetings that include an invited speaker; they then provide an opportunity for us to publicly discuss invasive species issues at the local level.

Given the far-reaching effects of invasive plants, our message can readily resonate with these groups.

A civic club comprised of local business leaders is receptive to concerns about any publicly-borne costs, especially if conveyed in terms of tractable solutions and the cost:benefit ratio of action. The appeal of our message to nature and outdoor clubs is obvious and needs no elaboration here. Our information carries more weight when the club member, no matter the organization, recalls that a family member, a friend, a neighbour or customer is affected adversely by one or more invasive plants (R. Westbrooks, personal communication). For example, not everyone fishes but most, if not all, know someone who does fish. The consequences of invasive aquatic species, such as alligator weed (*Alternanthera philoxeroides*), then become widely apparent. As we know (and need to express with conviction but no histrionics), invasive species are a public menace that sustained public action can greatly curtail.

A few points to remember in talking to civic groups.

- Grabbing the attention of the group in the first 1–2 minutes is essential but never exaggerate the threat, the damage or consequences.
- A PowerPoint presentation is mandatory: the audience needs to see in full-colour the damage these species cause.
- Never appear confrontational (i.e., a crank); convey carefully reasoned views.
- Emphasize the role that invasive plants play in damaging local communities, leading to costs and a reduced quality of life for all.

Using the media: getting the message out The most widely employed shaper of public policy remains the communication media: print journalism, radio/TV and the myriad variants of the press exclusively on the Internet (blogs, electronic newsletters). I am not nearly as familiar as I should be with the array of outlets on the Internet. Consequently, I will concentrate here on the more traditional media.

No outlet is too humble: Letters to the Editor For many of us our print participation in public discourse began with a Letter to the Editor, among the most readily available (and frequently read) outlets for disseminating information and opinion. For at least two centuries English-language newspapers have encouraged readers to comment on issues of the day through these short statements (e.g. Chernow 2004). Then as now, Letters serve a valuable role in bringing perspective, criticism and opinion to a much wider audience than could be spread by word-of-mouth. Furthermore, Letters to the Editor allow the reader to simultaneously evaluate opposing arguments, thereby

facilitating further discussion and the evolution of informed opinion.

The watchword for Letters to the Editor is in practice the same for all forms of outreach I discuss here: craft a carefully reasoned argument in clear, concise, non-strident language. Conveying conviction (backed by a reasoned argument) is fine; language that comes across as shrill or belittling of an opposing view torpedoes not only the author's credibility, but the merit of his/her position as well. Many print outlets allow inclusion of a brief description of the author's relevant background, e.g., his/her role in a project dealing directly with the matter at hand. A premium is placed on succinct, straight-to-the-point text, honed to a few hundred words. Advantages of a Letter to the Editor include its immediacy and role as a temporary placeholder in print for a position that can be given in more detail later. If the public hears not a murmur of concern about a potential plant invader and the need for its control, what else are they to conclude but that no problem exists?

Press release: a valuable catalyst to media attention Many of us are employed by government or academic institutions that convey their activities through a press release to the media. Press releases are characterized by an opening attention-grabbing title, followed by an equally attention-grabbing first few sentences of text, all meant to capture the reader's interest. The remaining text is divided into readily digestible 2–3 sentence paragraphs that distil the main points of a newsworthy event, finding, or outcome. Quotes by those involved in the news are commonly sprinkled through the text. In a few hundred words the press release attempts to spark interest by a media outlet to inquire for more information that leads to a published article. Writing effective press releases takes skill, as the best have catchy titles, immediately relate the news to a broad segment of the public and wet the appetite for more information. Even though most of us are reluctant to draw public attention to our work, it behoves us to work routinely with those who write press releases. Press releases are useful catalysts by which newsworthy items are first brought to the attention of the press.

Steps to take when a reporter calls Each press outlet from staid, big city newspaper to check-out stand tabloid seeks to engage and capture public attention within the maelstrom of information that envelops us all. That fierce competition for the public's attention sets many of the ground rules for our positive interaction with a reporter. A call from a reporter, as often triggered by a press release, should automatically set

into motion best practices that we have decided beforehand are effective for us; no one set of practices works best for all. Refusing to respond to a reporter ('I am too busy this week; I am going out of town tomorrow; I don't want to get involved') is not an option. Aside from being professionally discourteous, it leaves the reporter to ponder alternative explanations for your non-cooperation – none of them advance the control of invasive plants.

Do not expect the reporter who calls to be the current equivalent of Carl Bernstein and Bob Woodward, the famed reporters for the Washington Post, who exposed corrupt campaign practices in the U.S. presidential election in 1972. Your interview will instead begin with a reporter, who in all likelihood you do not know and who may represent a news outlet with which you are unfamiliar. Nonetheless, follow up all inquiries from the press; no outlet is too modest in circulation or stature. Aside from being courteous, these initial contacts can develop into much bigger opportunities to inform and explain an aspect of invasive plant biology and control.

For example, my colleague, Melissa Smith, and I recently agreed to be interviewed by the student newspaper at our university. The reporter was indeed a student; she asked good questions, listened politely and called back to check her facts. A small article on our current research on naturalized Asian bamboos subsequently appeared in the student newspaper. To our surprise a few weeks later, we were asked for an interview on a weekly gardening program by a National Public Radio (NPR) station on the opposite side of the country. (NPR is the close U.S. counterpart to the ABC in organization and independence.) The interview was rebroadcast on many NPR stations across the country, greatly enlarging the audience for what had been initially a short story in a school newspaper. The lesson here is that news organizations widely share their stories via wire services and web sites, facilitating just the sort of news amplification that occurred in our case.

Pointers for talking with the press.

- Respond to all inquires, however small the outlet's circulation.
- Establish an upbeat rapport throughout any interview.
- Stay focused on three main talking points on any theme (and have them at the ready should a reporter call).
- Do not use highly technical terms – plain, clear language is best.
- Be patient; cheerfully offer alternative wording for a point.

- Diplomatically deflect reporter's attempts to reduce a topic to an incorrect analogy; offer an alternative, accurate analogy.
- Volunteer your availability for any follow up fact-checking by the reporter.
- Do not be discouraged if your remarks are condensed or even omitted.

A common shortcoming by scientists and all those who deal routinely with topics in science and technology is the tendency to speak to the press with the same technical jargon and acronym-laden phrasing ('science-speak') as we use in conversations with colleagues. Don't. Not only does such jargon interfere with the public readily understanding your information, they will have tuned you out (literally, in a radio interview) long before you have finished making your points. Your only goal is the clear, accurate transfer of information, so that the reader, listener, viewer understands the main points. Reporters are accustomed to talking with a broad cross-section of society and facilitating effective information transfer. Consequently, they often attempt to boil down a point to its essence for you: 'In other words, what you saying is...'. This can be fine help but do not be reluctant to correct an oversimplification or an erroneous analogy. Offer an accurate, alternative suggestion.

Our addiction to 'science-speak' or its variant 'techno-speak' is so common that our affliction has been addressed by journalists and science-writers in several helpful guides (e.g. Dean 2009, Olson 2009, Baron 2010). These small books offer instruction that goes well beyond our attachment to jargon. Each provides advice on breaking down not only the walls of words and syntax that can distance us from the public but also the more worrisome walls of perception that the public sometimes forms about scientists, science and technology – important topics but beyond the scope of my remarks here. I was elated to learn in writing this paper that Australia has taken the lead in producing guides to writing 'plain language', for example, on biosecurity engagement, a synonym for many of the topics we are concerned with in controlling invasive plants (<http://invasivespecies.org.au/traction/permalink/WeedsNews3013> and more specifically, Kruger and Muirhead 2012). Although these references do not deal with the range of topics dealt with by Olson (2009) and others, they focus on the specific topic of biosecurity and contain helpful pointers.

Having the information you have provided to a print journalist accurately reflected in his/her article is of course essential. Reporters however are generally reluctant to allow you to read their drafts, partly because of the tight deadlines under which they operate.

Offer instead your availability later for 'fact-checking', as most reporters will ask whether they can call, if they have further questions (T. Steury, personal communication). Volunteering for this role reinforces the view of your cooperation and conscientiousness.

Finally, do not be discouraged (and swear off talking to the press ever again), if few of your golden words of information and wisdom appear in the news article. Reasons vary for an abridged news account, but most common is simply the competition among articles for a finite amount of space in a newspaper. Reporters routinely experience this disappointment: many a finely turned phrase or incisive description has been mercilessly chopped by an editor to meet time and space constraints. (I once had multiple explanatory emails and lengthy trans-Atlantic telephone conversations across three days with a conscientious reporter whittled finally to one small quote (<http://online.wsj.com/article/SB10001424052748703499604575512333943058138.htm>). On other occasions much of what I contributed in an interview did find its way into print. Persistence does eventually pay off.

Radio and TV: taking invasive plant issues to the airwaves

We need to take the same pro-active approach in providing information on radio and TV, as needed for print journalism. Although the general pointers listed above are also appropriate for talking to newspaper reporters, a big difference is the 'one-pass' character of radio/TV. An interview, even if taped for later broadcast, is a verbatim display of our comments, intonation and reactions to questions. Any editing is mainly to compress the interview into the time allotted or in TV to provide openings for so-called 'cut-aways' (i.e., visuals of scenes or circumstances we are addressing; the interviewee simultaneously provides the narration).

Radio/TV interviewers facilitate transfer of the message in an interview by directing and encouraging the interviewee to discuss the topic in plain, clear language. We can help this process by clearly conveying approximately 3–4 main points in our message and not straying into detail. Dissect a fact or number with follow up statements, such as 'What this really means to us all is... or 'Let me put this another way...'.

Reporters in radio/TV are trained to keep the conversation focused and relevant to the topic at hand, but you cannot expect them to be totally familiar with the huge range of topics that they report on. Do not be rattled (maybe easier said than done) if a reporter asks on air a totally unexpected question; they are simply attempting to get the conversation into readily understood terms for their audience. If perplexed by a question, make your best attempt to answer briefly

and move the conversation to one of your main talking points (G. Johnson, personal communication).

Talking with elected officials: being an honest broker of information It comes as no surprise that elected officials (politicians) avidly pay attention to the news from all outlets. They or their staffs comb news stories for topics of concern to their constituents. They may even have their staff tally the frequency issues appear in newspapers in their municipality, county, legislative districts or state. But press attention to issues about invasive plants will not in itself propel public policy: elected officials need and deserve information and frank assessment derived from us in face-to-face meetings.

Most of us were not trained to provide relevant information on plant invasions directly to elected officials, i.e., to become a provider ('honest broker') of essential information to policy makers. But our knowledge and expertise overlaps with some of the principal issues that public officials focus upon: the economy, security (of which biosecurity is part) and human health (Watson 2004). (We could safely add the health of other species here too, most notably livestock.) Our work proves to be highly relevant because invasive plants threaten the public's well being under all three topics. Politicians cannot be expected to make decisions in the best public interest on topics that so inextricably weave economics, security and health without access to well-focused, timely information and assessment. Furthermore, without our input they could form opinions and make policy, based on whatever advice is offered, from even questionable sources. Politicians are after all only human; humans, who in the best cases attempt to make good decisions in the public interest, as they perceive public interest.

We weed warriors, whether individually or collectively through, e.g. our professional societies, are the best reservoir of informed knowledge on invasive plants. We may individually feel committed to a particular position on preventing the entry of potentially invasive plants or applying public funds to curbing an ongoing plant invasion, but we are most effective in providing facts, dollar figures of cost/benefit and honestly derived predictions of scenarios if action is not taken. We interact most productively with officials (and their staffs) by emphasizing the 'we' (all citizens face together the consequences of these plant invasions), not the 'them' (politicians) vs. 'us' (some segment of the public) (J. Reaser, personal communication).

Requesting an appointment in the office of an elected official may be quite straightforward, especially if you are a constituent. This approach is

a reminder that elected officials ostensibly seek to serve their constituents, the people who put them in office; they are also politicians, who know that to be re-elected they must be pro-active on issues affecting the voters. Alternatively, we may gain an appointment, thanks to our affiliation with state/local weed societies. Both avenues illustrate that we do have credibility (not to be squandered) because of our background and experience.

An appointment in the office of an elected federal official (e.g., member of the Australian Parliament or U.S. Congress) requires careful preparation and realistic expectations. First, the stand-in for the official (who you are very unlikely to see at all) will be a member of his/her staff, who is characteristically bright, engaging, articulate and young. They are also harried: they usually have a packed daily schedule of 20 min. meetings with constituents, lobbyists, other staff, unannounced visiting youth groups from the home district (i.e., more constituents) and job-seekers, all the while needing to juggle other *ad hoc* and ongoing assignments. Without careful preparation on your part, your brief meeting can easily get lost in the blur, even if the staffer keeps notes.

Being succinct and to the point is essential. To avoid your meeting being relegated to the forgotten blur, you must grab the attention of the staffer at the outset, variously stating, 'Here's why I asked to speak to you today...' Part of your preparation is knowing in advance the current agenda, including pending legislation that affects (or may affect) the politician's public response to invasive plants. A 'fishing expedition' – simply using this rare opportunity to learn the politician's current agenda – is unproductive. Your core message should be a succinct, rational statement: the problem(s) listed in an array of talking points coupled to an all-important statement on solution(s). Your message should also be left in written form (double-spaced, one page only) along with the positive, cooperative impression that you have given the staffer (D. Friedman and J. Reaser, personal communication).

Useful points for meeting the staffers of elected officials.

- Access is difficult; prepare remarks carefully.
- Staffers have an ever-changing array of topics competing for their attention; yours needs to be memorable.
- Grabbing the staffer's attention in the first 1–2 minutes is essential.
- Never appear confrontational (a crank); convey your views as carefully reasoned.
- Succinct delivery is all-important; appointments are 20 minutes or less.

- Leave a clear message of a solution(s), not just the problem. Be up beat.
- Leave your business card; offer to send follow up information.
- Email a follow up ‘thank you for your time’ message with relevant attachments (whether requested or not).

You should view any meeting as part of a process, simply part of a long-term relationship with the official. (In contrast, the turnover of young staffers is high.) Your value to the process accelerates once you are viewed as a trusted source of information on invasive plants, whether you have the answer(s) yourself or can act as a reliable contact to a larger cadre of weed warriors from whom equally reliable information can be gathered.

Outreach on behalf of public action in combating plant invasions requires a multi-faceted, long-term commitment. It is unlikely that any one individual can shape the legislative process. Even professional lobbyists cobble together stakeholders and constituents to achieve the goals of the organizations they represent. To affect a legislative outcome, be willing to join groups that may appear to have little in common. Growers and graziers are our obvious allies, and their own professional organizations have long been vocal and savvy brokers of information on plant invasions. But our willingness to form *ad hoc* coalitions with a diverse array of groups can forge effective compromise and positive results for all (L. Clark and L. Van Wychen, personal communication).

Such alliances are particularly important if we are to gain so-called ‘champions’ among elected officials: politicians seek to be known for their support of legislation that is backed by a broad-based assembly of stakeholders and constituents. As pointed out above, plant invasions affect at least three main societal concerns – the economy, security and health. It is increasingly our responsibility to clarify the multiple links between these societal concerns and invasive plants. Once these links are clearly drawn, politicians are more likely to become legislative champions of solutions for which we can volunteer unbiased information and risk assessment.

“The elevator speech” The opportunities are few and far between for most of us to speak even briefly to an elected official, especially a Member of Parliament or Congress, about plant invasions. We need nevertheless to be ready for any such opportunity and in a larger sense, ready to deliver our message to anyone on an array of themes of varying specificity. These so-called ‘elevator speeches’ (literally given in the time that you share an elevator ride with someone, who you otherwise are unlikely to see in any other way) are the

ultimate distillations of succinct messages (S. Burgiel, personal communication). We all should be able to swiftly present a case, make our main points, state its relevance to the public, and provide take-home points (with action items and solutions) in 30–60 seconds.

Few of us can routinely generate a crisp, cogent elevator speech without some preparation, so having prepared at least three main points ahead of time becomes essential. Many of my colleagues and I include the preparation of elevator speeches in the training of our graduate students. It forces them to think about the reasons anyone outside our discipline would appreciate their research. If justification is presented as a rambling, disjointed statement, it could be readily perceived as esoteric or pointless. Elevator speeches find uses in many social settings – all good preparation for that time when we have a fleeting chance to speak to a policy maker. (Or as my graduate students sagaciously point out, these carefully constructed sound bites are equally useful in explaining their research to their grandparents!)

Giving testimony: outreach with potentially maximum pay-off The opportunity for face-to-face conversations with elected officials themselves does arise in a more formal setting, such as testimony before a parliamentary or congressional committee. (My experience in this process is limited to the U.S.; my understanding from Australian colleagues is that the general process I describe below is much the same in Australia and New Zealand.)

Being called to give testimony is a golden opportunity. In the U.S. your unabridged comments are printed in the U.S. Congressional Record – a massive accumulation of the daily proceedings in both houses of Congress (and much more). Written testimony from witnesses (expert and otherwise) before Congressional committees is submitted beforehand, to facilitate committee members’ preparation.

Requests to testify are carefully determined by Members and their staffs; a person is called because it has been determined he/she can provide essential information or perspective. All federal legislation in the U.S. originates in committees in the Senate and House of Representatives and then winds its way through amendments and re-votes to an eventual open vote on the floor of the Senate and the House. In a committee hearing, a witness is in effect offering information or opinion or both on how specific revisions to a bill can make it effective law. Reading verbatim the prepared text before a committee is acceptable but more effective is re-phrasing or paraphrasing statements in oral testimony. Giving an *ad hoc* iteration of the written testimony allows the witness to respond immediately

to the dynamics of the hearing, e.g., counter-point to a comment made by a previous witness. Directly addressing a question mishandled or deflected by another witness shows initiative and a willingness to tackle questions deemed too difficult or contentious by others. Even though providing information before a Congressional committee can have immediate effect on the language in a bill, it is important to view testimony as part of the process, not an end point. A handy guide on effectively interacting with elected officials on environmental issues has recently been published (Ecological Society of America 2012). Clearly needed however is much more guidance in undertaking this important new task for weed warriors.

Conclusion None of us is likely to participate routinely in all the diverse avenues by which the public and policy makers can be informed about the threats of invasive plants and the solutions. But we must accept a professional obligation to engage in at least some of these opportunities, not when simply convenient but as an ongoing professional responsibility. The public speaks out forcefully on issues of shared value and concern. In theory (if not always in practice), government seeks the means to address the public will. But the public can hardly be blamed for inaction when invasive plants damage our economies, our biosecurity and our own health, if we weed warriors fail to provide the information they deserve in order to affect sound decisions.

ACKNOWLEDGMENTS

I am grateful to the following colleagues, who generously shared the lessons and wisdom of their extensive outreach experience with me; Stas Burgiel, Larry Clark, David Friedman, Glenn Johnson, Mark Lonsdale, Nancy Mack, Jamie Reaser, Sarah Reichard, Eric Sorensen, Tim Steury, Lee Van Wychen, Betsy Von Holle and Randy Westbrooks. I much appreciate

the invaluable help I received from Rob and Fiona Richardson in the final preparation of my manuscript.

REFERENCES

- Baron, N. (2010). 'Escape from the Ivory Tower: a guide to making your science matter.' (Island Press, Washington, DC, USA).
- Chernow, R. (2004). 'Alexander Hamilton.' (Penguin Press, New York, USA).
- Davis, M. *et al.* (2011). Don't judge species on their origins. *Nature* 474, 153-4.
- Dean, C. (2009). 'Am I making myself clear?: a scientist's guide to talking to the public.' (Harvard University Press, Cambridge, MA, USA).
- Ecological Society of America. (2012). 'An ecologist's guidebook to policy engagement.' (Ecological Society of America, Washington, DC, USA).
- Groves, R. (1999). Sleeper weeds. Proceedings of the 12th Australian Weeds Conference, eds A.C. Bishop, M. Boersma and C.D. Barnes, pp. 632-6. (Tasmanian Weed Society, Hobart).
- Kruger, H. and Muirhead, A. (2012). Biosecurity engagement: communicating biosecurity messages in print. Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES), Canberra ACT, Australia.
- Mack, R.N., Simberloff, D., Lonsdale, W.M., Evans, H., Clout, M. and Bazzaz, F.A. (2000). Biotic invasions: causes, epidemiology, global consequences and control. *Ecological Applications* 10, 689-710.
- Olson, R. (2009). Don't be such a scientist. Talking substance in an age of style. (Island Press, Washington, DC, USA).
- Simberloff, D. (2011). Non-natives: 141 scientists object. *Nature* 475, 36.
- Watson, R.T. (2005). Turning science into policy: challenges and experiences from the science-policy interface. *Philosophical Transactions of the Royal Society B* 360, 471-7.