

OPERATIONALIZING RESEARCH FINDINGS; PUBLISH OR PERISH??

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How do you measure your success as a Research Scientist with CALM? Perhaps its your publication rate? Perhaps its how often you are cited by other scientists? Perhaps its a complex formula relating both these measures of greatness?

While publications and citations are important measures of productivity (and even they can be misleading - like all descriptive statistics!) I propose that as applied researchers, we should also be judged on our direct contribution to land management and on our contribution to achieving corporate goals. Perhaps we should tally the operational prescriptions resulting from our work? Or savings to the community (in tangible dollar terms or less tangible conservation terms) as measures of our success as researchers?

It is vital that we develop criteria for measuring our success and these should include all of the above and not simply rate of publication. For example, one of the greatest contributions made to forest management was by George Peet with his development of prescribed fuel reduction burning techniques. This now routine operation has saved the community millions of dollars (plus human lives). However, George's publication record would have him ranked as a mediocre contributor if publication rate alone was the measure of success.

Applied research scientists have not finished the job until findings or results become routine operations or have policy acceptance. This is the most challenging phase of our research and one which must be worked at with all the enthusiasm and dedication normally associated with doing the field work. A good applied scientist is not one who only publishes complex, confounding technical papers, but one who can communicate findings at various levels and who follows his/her work through to the operational phase. To see your research come to fruition as a routine operation is far more rewarding than being published in the "Journal of Indian Forestry" or some other internationally famous journal.

How do you get research results into operations? Personal commitment is the short answer. You must be the salesperson of your research. Generally, operations staff will not queue to get a glimpse of your results. You must convince them that what you have discovered, or thought of, is good for them and for land management. Arrogant researchers are lame ducks and will be despised by operations staff, regardless of publications list.

The one time Research Inspector, now General Manager, Roger Underwood, produced what he called a "Fire Point Plan For Implementing Research Findings". Before re-introducing Roger's Plan, I would like to present what I have found to be useful things to do BEFORE you get results to implement. From my experience, research results are easier to implement (using the 5 point plan) if the research has operational "stake holders".

Here are a few ideas on how to attract stake holders or "operational investors" into your research.

Do involve operational staff at all levels, both District and Regional staff, at the conceptual stage of your research. Do this preferably by personal contact. Most managers are also trained scientists (many are closeted researchers!) and are keen to discuss concepts, ideas and scientific procedures. It is important to allow operations staff to contribute to the formulation of your research project, over and above the Research Project Plan. Engender enthusiasm about the project and you will find this contagious. Be willing to philosophize about your research or about anything else with District or Regional Managers,

preferably on a log under a karri tree in Strickland Block or in the shade of a gidgee tree in the Gibson Desert. Work at developing friendships with operations people, including the bulldozer operator who will be constructing your plots. Don't hesitate to hop up on the bulldozer and have a go at plot construction yourself! - you will get a better appreciation of that man's job and how important he is to the success of your project. Inform him as to why he is constructing the breaks - this applies to everyone involved on your project. Like you, others like to know why they are doing certain jobs.

After personal contact and a field trip to the intended research site, follow up with a written summary of discussions, what was agreed to, who would do what etc. (over and above formal RPP pro-forma). Ask that this summary be pinned on the District or Regional notice-board. On some occasions, I have had copies sent out to wages personnel with their pays.

Whenever you are in the District to do field work, call in at the District office (preferably around smoko time) and say g'day. Let the District Manager know you are in his/her district, what you will be doing and for how long. Communicate developments/findings. Personal contact with operations people throughout the duration of your project is important when you come to the phase of implementing your research findings. This will grease the way for the implementation of Roger Underwood's 5 Point Plan, which is as follows:

The Five Point Plan For Implementing Research Findings (after Roger Underwood).

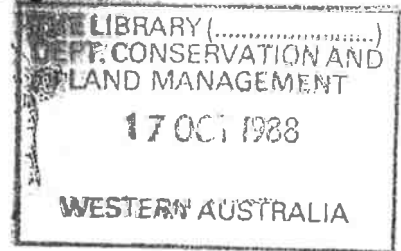
- Step 1. Research findings are first presented to colleagues in the Research Division. The purpose is to confirm the validity of the work, in terms of design, analysis and conclusions and to agree upon the implications to management.
- Step 2. Research findings are then written in non-scientific language and presented to operations staff in the form of new, substitute or amended policies or prescriptions.
This is accompanied by an appreciation of the expected benefits and likely costs of the innovation proposed.
- Step 3. Where necessary, work is then scaled up in field level demonstration trials. These are organized collaborative projects between research and operations staff, and are so designed as to ensure proposals can be properly evaluated for cost, practicality and safety.
- Step 4. The original research staff participate in the training of operators and early implementation. This ensures rapid attention to teething problems and avoid serious misinterpretation as well as highlighting the areas where research is incomplete.
- Step 5. Research staff contribute to review of procedures and prescriptions. This ensures the incorporation of the most recent findings and first-hand experience of management problems and concerns.

Perhaps the motto for applied scientists might be: People, Prescriptions and Publications or Perish

RESEARCH INFORMATION NEWS

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Editorial

Research Division staff who were involved in last month's prescribed aerial burning experiments in the Gibson Desert Nature Reserve have returned with news of a successful burn. For those that remained behind we have endeavoured to bring you closer to the action by reproducing a print. Please see back page. No names have been mentioned of either the "subject" or the "donator" for fear of hostility!

Thanks to all contributors to this our ninth edition of the "Newsletter".

....Ed

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