Proposed Changes to the structure of Tasmania’s Forest Practices Board

The Forest Practices Unit was originally established as part of the old Forestry Commission back in 1985.

In 1994 the Forestry Commission was re-structured to create Forestry Tasmania, Private Forests Tasmania and the Forest Practices Board. Further structural changes have now been proposed. Under the proposals, the Board will have two additional directors; one with expertise in harvesting and processing; and another who is a representative of rural local government. The Managing Director of Forestry Tasmania will no longer be a member of the Board. The proposed new Board will comprise:

- a director of Forestry Tasmania with expertise in forestry
- a director of Private Forests Tasmania with expertise in forestry or related science
- the Chair of the Board of Environmental Management and Pollution Control
- a person with expertise in harvesting and processing
- a representative of rural local government.

In addition to the above changes, it is proposed that the statutory links between the Board and Forestry Tasmania will be removed and the Board will function as a separate, independent body. These proposals will increase the independence of the Board and bring wider expertise and formal links with the planning system of local government. In proposing these changes, it must be noted that the fundamental philosophy of the forest practices system will not change - there will be a continuing strong commitment to self-regulation through training, education and the fostering and encouragement of good forest practices. Tasmania’s forest practices system has long been regarded as one of the best in the world. However, we can’t rest on our laurels. The Board is committed to continuing improvement so that our system can meet future challenges and be leaders, not followers, in being able to demonstrate and gain accreditation for sustainable forest management.

Graham Wilkinson, Chief Forest Practices Officer
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Welcome to the Forest Practices newsletter

Welcome to the first Forest Practices News.

This newsletter has been conceived as a new means of efficient communication between the Forest Practices Board, Forest Practices Officers, industry, and others with an interest in the responsible, sustainable management of Tasmania’s forest resources.

The idea of a forest practices newsletter is not new, but now we have actually got into print! We see this publication as a potentially useful new vehicle for efficient exchange of ideas and to generally help keep members of the forest practices community in touch with one another. This first edition is somewhat exploratory - we would appreciate your feedback and your ideas. Either email the Hobart Office of the Forest Practices Board, or take up discussion directly with the contributors themselves via the contact information at the foot of each article. We would also welcome contributions from outside the Forest Practices Unit. We look forward to hearing from you. To keep costs down we would prefer to email the newsletter to you. Please let us know your email if you wish to be included on the distribution list. If you don’t have email please send your preferred address.

Kevin Kiernan, Senior Geomorphologist – kevink@fpb.tas.gov.au

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After the Regional Forest Agreement

The forest practices system post-RFA

The RFA gave a big tick to Tasmania’s forest practices system but identified that ‘continuing improvement’ must continue! The RFA also requires the Board to expand the 3 Year Plan process and to monitor and report on reforestation and the maintenance of a permanent native forest estate. The latter recognises that some native forest will continue to be converted to agricultural use or to plantations. However, the objective is to ensure that Tasmania will maintain at least 80% of the 1997 area of native forest as a permanent native forest estate. Further details about these processes will be circulated to all Forest Practices Officers and forest managers.

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Karst and the RFA

The conservation of karst was not specifically addressed through the RFA process and as a result FPOs will need to remain alert to karst issues.

Geoconservation is not specifically regarded as a CAR value, and no formal reservation to safeguard geoconservation values such as karst caves has flowed from the RFA. While some karst at Mole Creek was included in areas to be reserved for biological or other values, karst values were not taken into account. For example, the proposed new tenure of parts of the Great Western Tiers as Conservation Area does not provide security from significant threatening processes such as limestone quarrying, which would obviously have the potential to cause major impacts on landforms, including cave systems, and indeed whole underground drainage systems in karst. Longstanding reserve proposals such as the proposed Mole Creek Caves National Park and Croesus Cave area remain unresolved.

Nor has the RFA changed the situation with respect to compensation considerations. Because karst was excluded from the RFA, where karst special values may preclude operations on a property beyond the 5%/10% threshold, the RFA does not provide for compensation for an affected landowner. Such compensation will continue to have to be met from other sources rather than from Commonwealth monies flowing from the RFA.

Forest Practices Officers should continue to consult with the Senior Geomorphologist where operations are proposed on karst or within karst catchments.

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Current reviews of the Forest Practices Code

As many readers will be aware, a number of reviews are in progress. The current state of play is:

- Steep Country Review - the Technical Working Group chaired by Robin Cromer has completed its report. The report recommends some relatively minor adjustments to the Code and these will be incorporated into the next edition of the Code.
- Soil and Water Quality Review - the Review Panel chaired by Dr Peter Davies submitted a draft report to the Forest Practices Advisory Council in July 1998. This report is available for public comment and submissions will be accepted until 30 August 1998.
- Safety aspects of the Code - a Technical Working Group convened by Paul Wilkinson has reviewed the Code from the perspective of occupational health and safety, in order to ensure that the provisions of the Code do not conflict with safe working practices. A draft report has been considered by the Forest Practices Advisory Council. Results from all of the above reviews, plus a number of other changes which have been identified over the last few years, will be consolidated into a draft revised Code later this year. There will be opportunity to comment on any proposed changes prior to a new Code being issued. However, don’t necessarily wait until a draft Code is produced. If you have any ideas on ways to improve the current Code please continue to let me know!

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Plantation Expansion and Implications for Landscape

The current expansion of plantation forestry throughout the state generally involves the conversion of native forest to plantation, or the reafforestation of agricultural lands, to produce a new medium-term forest crop.

In either a native forest or cleared paddock situation, the new plantations appear distinctly different due to their consistent colour and even texture, their often rectilinear boundaries, and their short rotation (barely reaching a forest appearance stage before being harvested). Each of these factors can result in plantations having a strong visual contrast with their surroundings. Plantations therefore have the potential to significantly change the scenic character of an area, particularly in rolling topography and on steep hills, such as occurs on private property around the Huon, Scottsdale and Mersey-Forth areas.

The most visually prone and sensitive locations are hill tops (often appearing as skylines), especially where native forest occurs. Roadside areas with established regrowth native forest stands and clumps are also very visible. These native forests are significant to the character of the existing scenery. Once converted to plantations they expose or transform the landscape. In addition, progressive but dramatic transformation may occur through expansion of extensive plantations across a large contiguous area.

Visual management policy and guidelines for plantations have been developed to assist in choosing suitable siting and identifying constraints that will need to be considered at the establishment and timber harvest stage. These are currently available from the FPB. Detailed visual management practices and design principles are also currently being developed to assist planners with the layout and design of new plantations and the extension of existing areas. These should be available by mid-year.

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Geoheritage database

An Access database of sites of geoconservation significance has recently been developed, including geological, geomorphological and soil sites of nature conservation significance. It has been derived primarily from pre-existing databases. While the source databases mostly involved only public land and no new fieldwork could be undertaken within the resources available, the exercise has produced a useful listing of 432 sites state-wide. General management guidelines were proposed for important sites, with special provisions proposed for 31 of the sites and formal reservation for a further 16. The project also enabled work towards development of a georegional framework within which assessments of the conservation significance of geoheritage features can be made, much as the development of bioregions has provided a basis for more effective initiatives in bioconservation. All sites on the database have been refereed by a specialist panel of geoscientists, who have also refereed the management recommendations. In due course it is hoped this can be made available more widely via CONSERVE, in the meantime it provides another useful tool to assist FPB specialists provide reliable information when information is sought regarding potential geoconservation values.

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Timber Harvesting Plan Cover Sheet Database

An Access database used to create THP cover sheets was released for use in December 1997. Developed by David Tucker and computer programming company Verdant Pty Ltd (in consultation with numerous other people), the database allows users to enter information in a standardised and accepted format and produce a THP cover sheet.

The THP cover sheet database maintained at the Forest Practices Board has several uses:
- compilation of statistics for annual report of Forest Practices Board to Parliament;
- selection of sample of THPs for annual monitoring by Forest Practices Board;
- responding to enquiries/complaints on forest practices issues;
- monitoring of special values by the Forest Practices Board specialists.

In the past, there has been considerable variation in the information used to complete THPs, delays in the Board receiving cover sheets, and some procedural errors (e.g. signing / dating of plans) in completing THPs. The new database allows only specific information to be used to complete THPs and also checks that information entered conforms to legal requirements (e.g. the date the plan is approved on must be before or on the same date as the date from which the plan applies from). The new
database also has a facility to email database information (including information on variations) to the Forest Practices Board, thereby speeding up the process of transfer.

In addition to the new database for standardising the way in which THP cover sheets are prepared, the Forest Practices Board adopted a new policy on the THP numbering system of all FPOs (Planning). From July 1 1997, all FPOs changed to a sequential 3-letter, 4 number system starting from 0001 (or continuing from an existing sequential numbering system).

In early May 1998, an update of the database was sent to all users which has eliminated a number of the teething problems. The system should now be fully operational and all users should begin to use the export facility from the main menu to create a zip file to send as an email attachment to the Forest Practices Board at info@fpb.tas.gov.au. All users should arrange for someone to export all THP cover sheets via email to the Forest Practices Board once a week (FPOs are reminded that cover sheets must be forwarded as soon as practicable after apprival as possible). The sending of a paper copy for people using the Access database to create cover sheets is no longer required.

People preparing cover sheets manually or without the Access database must still use the new cover sheet and tables of information issued by the Forest Practices Board - these are available on request. These people should also forward all facing sheets to the Unit as soon as possible after a plan is approved. For information on the use and installation of the database, please contact Mark Wapstra.

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Field issues

Plantation development and aboriginal site management

Plantation development is exposing a number of issues for the management of Aboriginal sites that have not previously been detailed. This note attempts to scope the situation. It outlines the issues; presents the relevant legislation and interpretations; and outlines current practices and options for management.

The Issues
Post RFA the increase in plantation development for wood production has been rapid. Archaeological survey of areas developed for plantation has also increased with the development of the Aboriginal potential zoning and the availability of the Aboriginal Heritage Officer. In two locations, Huon and Circular Head, the issue has already been confronted in several coupes. It is likely that occurrences similar to these will increase with further work. The issues are likely to be more intense in wet forests with duplex or peat soils.

The core issue is that Aboriginal sites cannot be located until a certain amount of work has been conducted in the coupe.

The Forest Practices Code
The Code states that
• the cultural heritage of all ethnic groups (e.g. Aboriginal and non-Aboriginal) will be considered in all stages of forest management
• Protection of or minimizing impact on the cultural heritage should be achieved through identification, recording and assessment and subsequent management by prescription or reservation of significant sites;

• If sensitive areas are identified, archaeological surveys will be undertaken before forest operations start if site conditions are suitable;
• protection requirements will be listed in the Timber Harvesting Plan
• Site recording and management of Aboriginal cultural heritage will be in accordance with the Aboriginal Relics Act 1975.

Montagu Caves, northwest Tasmania
• In sensitive areas of poor archaeological visibility, regular monitoring during forest operations should be done (by operators, supervisors or Forest Practices Officers).
• When archaeological sites or features associated with archaeological sites are located during operations, a Forest Practices Officer will be notified and the site recorded prior to further disturbance.
• Protection of significant sites should be achieved by maintaining confidentiality, by management prescriptions such as physical protection works, changing location of operations (roading, logging), by reservation or special management areas.

Provisions of the Aboriginal Relics Act 1975
Definitions
The Aboriginal Relics Act protect Aboriginal sites in wood production forest.
The relevant sections of the Aboriginal Relics Act are Section 1 (3). a relic “...is any artifact, painting, carving, engraving, arrangement of stones, midden, or other object made or created by any of the original inhabitants of Australia or the descendants of any such inhabitants”. These must have been made prior to 1876.

Implications of this definition.
This section indicates that every artifact is a relic. As all the later sections of the Act refer to relics, the interpretation that every artifact is covered by the Act has been the normal interpretation of the Parks and Wildlife Service that administer the Act. ‘relic’. That is, all artifacts are protected under the Act, irrespective of their number”. Therefore each and every artifact located in the field is covered by the Act.

Management of Relics
The Act states in Section 14 (1) that ‘Except as otherwise provided in this Act, no person shall, otherwise than in accordance with the terms of a permit granted by the Minister on the recommendation of the Director-

a) destroy, damage, deface, conceal, or otherwise interfere with a relic;
b) make a copy or replica of a carving or engraving that is a relic by rubbing, tracing, or other means that involve direct contact with the carving or engraving;
c) remove a relic from the place where it is found or abandoned;
d) sell or expose for sale, exchange, or otherwise dispose of a relic or any other object that so nearly resembles a relic as to be likely to deceive or be capable of being mistaken for a relic;
e) take a relic, or cause a relic to be taken, out of this State; or
f) cause an excavation to be made or any other work to be carried out on Crown land for the purpose of searching for a relic.

3. If sites are found, these will be marked for the FPO.
4. The District/Co are made aware of the artifacts and the need to avoid them. The possibility that further plantation development will expose additional sites is explained.
5. A further survey may be recommended after further site preparation.
6. All sites found at this stage will also need to be avoided.
7. Planting over known sites may not be appropriate as this could be in contradiction of the Relics Act clause 14 (1 (a))

The problem here is that prior to any preparation being carried out at the site it is not possible to determine whether there will be artifacts present. The ground surface visibility is not sufficient to allow adequate survey. It is only when the ground is partially cleared that the survey will provide results. However if this survey is completed after windrowing and burning, the visibility, while improved, will still be less than after the coupe is further developed for planting such as ripped and moulded. This stage provides the greatest level of ground surface visibility except for those situations when holes are machine dug to plant the individual trees.

Current Advice by Senior Archaeologist/ Aboriginal Heritage Officer
• That all artifacts are to be left in situ and not further disturbed.
• A single artifact is granted a 5m buffer while a larger site has appropriate boundaries established which are never less than 5 m from the closest artifact.

A larger site where a number of artifacts are located within c. 30 m of each other may require large areas of ground to capture within the reserve.

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Rare and threatened species – the role of Forest Practices Officers

FPOs who can tear themselves away from their computers and escape into the bush are in an excellent position to identify sites which may contain rare or threatened plant species.

The RFA lists about 160 forest or forest associated species which require some degree of protection (by reservation or prescription). The Forest Practices Code requires FPOs to contact the FPB botanist if rare or threatened species are known to occur in a proposed operational area. In turn, the CFPO (through his representative, the aforesaid FPB botanist) is required to liaise with PWS to determine appropriate management for the species. On State forest, sites containing these species are often incorporated into Special Management Zones. On private land, compensation may be available to landowners, if requirements for protection exceed the “duty of care” provisions of the Code. This can be a complex process (which space precludes me from discussing). Rare or threatened species can often be catered for by prescription in native forest operations (e.g. partial logging) but such options are rarely available when logging is to be followed by clearing for plantation or agriculture.

I don’t expect FPOs to be able to identify most rare or threatened species - there aren’t many people (including botanists) who can trip over a clump of grass, hold up its flowerhead, and say “Wow, I think I’ve got some _Deyeuxia apsleyensis_ in my hot little hand”. However, a few species are fairly distinctive, and FPOs have identified many species in or close to operational areas. They include the State’s largest population of slender tree fern (_Cyathea cunninghamii_) in the Hastings block; _Hibbertia calycinca_ (golden guinea flower) on Scamander Tier; threatened _Xanthorrhoea_ species (grasstrees) near Goulds Country; several populations of _Acacia pataczekii_ (Wallys wattle) in the Ben Lomond area; _Eucalyptus cordata_ on Forestier Peninsula; and _Helipterum albicans_ (chamomille sunray) on Surrey Hills.

Most rare or threatened plant species are associated with specific places or distinct and localised environments. Such sites include serpentine substrate in the Beaconsfield area and the West Coast; exposed sites on Tasman Peninsula; dry, rocky dolerite ridges and knolls in the Eastern Tiers (especially the Central East Coast); streamside vegetation in drier parts of the State; and remnant forests in the Midlands. In fact, I recently surveyed a property in the northern Midlands after it had been referred to me by an FPO who was preparing a THP for a large bush block. I collected a semi-prostrate shrub (_Leucopogon_ species - common name is bearded heath) which seemed a bit unusual. Closer analysis at the Tasmanian Herbarium showed that it might be a new species, or a species which had not been previously recorded from Tasmania, and was only known from a few places in semi-arid desert country in Victoria. The sample has been sent to Victoria for final determination.

So what’s the message? If you are preparing a THP for an unusual site, particularly in dry forest, please let me know. If you collect a plant that you think is unusual send me a specimen, dried or fresh in a plastic bag. (Don’t try sending them by fax or email - it doesn’t work, especially in the case of slender tree ferns). There have been several new forest species turn up over the last few years - you may even get one named after you! (How does _Leucopogon larneri_ sound for a semi-prostrate bearded heath?).

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Wedge-tailed eagles: the importance of pre-operation surveys

Thanks to all those that have been diligently searching for and reporting Wedge-tailed eagles nests prior to forestry operations. Unfortunately, we are still receiving a high number of reports of nests discovered unexpectedly whilst the operation is underway.

Most people in the industry now know that wedgies require certain amounts of forest for nesting and are timid nesters. Disturbance during the breeding season can lead to nest desertion, reducing breeding success in what is already a small breeding population. Contrary to what some believe, by no means are all nest sites known; there are many regions of the State where nests are yet to be discovered.

Obviously the best conservation measure, for the birds and the industry, is to find the nests in the vicinity before any forestry operations, including roading, commence. Pre-operation surveys are vital for this species.

To this end the Senior Zoologist, Forest Practices Board often recommends that coupes and areas immediately adjacent to good nesting habitat be searched prior to operations. In many cases these searches return negative results. However sometimes, even though areas have been searched, nests are subsequently discovered during the operation. In these situations it is very important that we determine the reason for the nest not being discovered in the original pre-operation search. For example, the forest type may not have been conducive to searching by foot and perhaps other search methods would have been more appropriate. In other situations perhaps more specifically-trained people should have been used (e.g. Parks and Wildlife specialists, trained Fauna Liaison Officers).

On rare occasions, despite extensive searching by competent people, nests are missed. In these cases, it is extremely important that all people working on an operation are aware of and follow the procedures established for reporting such nests (see procedure set to all FPOs from CFPO on 29.9.97).

On a more positive note, we would like to congratulate staff of Derwent and Bass Districts for taking pre-emptive action in discovering several new wedgie nests in the Wielangta and Mutual areas. By the efficient use of a helicopter and trained “eagle eyes” these nests were discovered well before any roading or harvesting. The helicopter surveys covered a small number of coupes but, sensibly, were extended to search other suitable habitat in the area. Helicopter searching is only necessary for some very thick or inaccessible areas but can be cost effective in any area if the machine is available for other reasons. In most cases searches on foot by appropriately experienced/trained people is perfectly adequate. The pre-emptive action of other Forest Practices Officers, particularly in Eastern Tiers District, has produced similar successes (even if success is the fact that no nests were found). Many people have arranged for several coupes to be searched by Parks and Wildlife consultants well before forestry operations are to occur. Some planners are also successfully applying the “Establishing Priorities for Searching Coupes for Nests of Wedge-tailed Eagles” by Nick Mooney, Parks and Wildlife.

If anyone requires surveys to be conducted for wedgie nests by Parks and Wildlife consultants, please forward maps and deadlines to the Senior Zoologist, Forest Practices Board. You will then be informed of the approximate costs of the search and the details of the agreement made with Parks and Wildlife consultants to conduct the search. A report on the search result and recommended further action will be forwarded to you for your planning purposes. In the majority of cases, known nest sites can be worked around operationally by establishing reserves and timing logging to be outside the breeding season (August to January inclusive). In reality, the majority of nests are in predictable places and many are located such that reserves can be designed as extensions to stream-side reserves or as alterations to coupe boundaries.

The following are all available from your Company/District Fauna Liaison Officer or the FPB, Senior Zoologist:

- Bird of Prey nest record sheets.
- What to do when an eagle nest is found in an area intended for logging by FPB, Senior Zoologist and Nick Mooney, Parks and Wildlife.
- Wedge-tailed eagle nest conservation - some hot tips! by Nick Mooney, Parks and Wildlife.

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Forest landslides

Landslides pose a significant geomorphic hazard in some Tasmanian forest environments, but their mechanics are often poorly understood.

Landslides can seldom be attributed to a single cause, but the geology and terrain are usually considered to be the primary factors (e.g., dolerite slope deposits over sandstone; slopes above 20°). However, these are predisposing rather than causative factors - a landslide may not eventuate unless a trigger mechanism comes into play. Most commonly, the trigger is the onset of higher pore water pressure, often during an intense or prolonged rainfall event. Some forest operations have the potential to exacerbate this risk.

How forestry activities can increase pore water pressure.
The removal of the forest cover, and attendant loss of transpiration, will lead to an immediate increase in the water yield from a coupe. Soil strength will also be compromised as the roots rot over the following years. Depending upon the success or otherwise of regeneration, there will be a critical window of a few years during which pore pressures will be higher than in the immediate past, and, if regeneration is delayed or slow, then the situation will be compounded by the loss of binding strength provided by the previous generation of roots.

Cuts established during road construction can remove support from the toe of potentially unstable slopes, and they often also expose subsurface water moving in the soil profile or slope deposits. This water (and water draining off the road and any extra surface water) is collected in table drains and discharged from culverts spaced according to the standards set in the Forest Practices Code. Thus, diffusely moving subsurface water may not only be brought to the surface, but is discharged in a series of concentrated point sources. This can lead to localised increases in pore water and hence increased landslide hazard. Provided the drainage system is well designed this should not be enough on its own to cause instability. However, a hazardous situation can develop if the roads and drainage are not well maintained. Culverts invariably block-up if left alone for long enough, and the combined discharge from a couple of blocked culverts concentrated into a single discharge point some distance further down a road can put some Class 2 streams to shame.

Conclusions

While landslides are natural phenomena, “unnatural” activities in a landslide-prone area have the potential to cause landslides that might not otherwise occur for millenia, if ever. While logging has the potential to result in significant changes to pore water pressure in landslide-prone materials the establishment of a new forest crop means those changes are relatively short term. However, changes associated with road cutting last much longer. The Code provides a number of will statements regarding road maintenance but these only apply whilst the THP is valid. Some recent forest landslides have occurred where drainage of disused forest roads has fallen into disrepair long after operations had ceased resulting in blocked culverts and unplanned excess water load on susceptible slopes. Where a decision is made to construct a road in landslide-prone terrain, it is incumbent upon those responsible to properly program and budget for ongoing maintenance on a permanent basis or until the road is put to bed and natural drainage is re-established. An important cost component of road cutting in such areas is the ongoing maintenance of the drains and culverts for the lifetime of the road, ad infinitum. And if it is casually left simply as a rainy day activity, it may happen too late.

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Guidelines for operations in sinkhole terrain

The Forest Practices Code contains some specific provisions in relation to the management of sinkholes and related features. However, questions have sometimes arisen as to how “avoidance” is best achieved.

The sinkhole avoidance provisions in the Forest Practices Code exist largely to maintain soil and water values. Sinkholes are essentially stream channels tipped on end. Water may not be evident flowing into them across the ground surface, but flow commonly occurs below the soil surface. This flow has the potential to wash particles out of the soil profile and into the solution channels formed in the limestone or dolomite bedrock. Soil loss in this manner can occur on very gentle slopes, and may not become visually evident until there is sagging or collapse of the soil, or until rock outcrops begin to protrude as the ground surface is progressively lowered. Recent research indicates that where forest has been removed most of the new sediment accumulating in karst caves is due to this process - most of the sediment has been shifted by diffuse infiltration of rain into the soil rather than having been washed by streams into open cave entrances. The essential point in managing around sinkholes is therefore not so much the surface topography as the soil water activity that it implies.

Taking such considerations into account, new guidelines have recently been prepared to facilitate more effective management of sinkhole prone terrain. The guidelines provide advice relevant to operations in existing native forest and pasture rehabilitated to forest. Copies are being distributed at Forest Practices Refresher courses. If you would find a copy useful but are not being “refreshed” this course season, please drop me a line and I will post a copy off to you.

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