



PROJECT REPORT

The Forest Genetics Council Extension Technical Advisory Committee continuous improvement report and recommendations for program evaluation

Project Report



FORREX Forum for Research and
Extension in Natural Resources

**The Forest Genetics Council
Extension Technical
Advisory Committee
continuous improvement
report and
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program evaluation**

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Kathie Swift



FORREX Forum for Research and
Extension in Natural Resources

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EXECUTIVE SUMMARY

As part of its continuous improvement cycle, the Extension Technical Advisory Committee (ETAC) of the Forest Genetics Council's Extension and Communication Sub-Program has committed to reviewing its 2005 extension strategy so that recommendations can be made for the evaluation of its program and products to determine their effectiveness in achieving the planned learning objectives. During the past few years, there have been significant changes to the environment in which many of ETAC's target audiences find themselves. For some groups, there are now significant constraints on both their time and travel, and an emphasis on reducing costs in any way possible. For other groups, there are job losses or significant reductions in the resources to do their jobs.

During the past few years, the Forest Genetics Council itself has undergone a Challenge Dialogue with the resource conservation community and as a result has drafted a new strategic plan. Any future work of the ETAC must be adjusted to reflect these new strategic documents from the Council.

Besides addressing the new strategic direction of the Forest Genetics Council and the realities of their target audiences, the ETAC has a number of additional items to consider as it moves forward in updating its extension strategy via program evaluation. Specifically, ETAC will have challenges in evaluating three out of the five learning objectives. These challenges are due to the fact that many other groups within the Forest Genetics Council are also conducting activities associated with achieving these learning objectives and so identifying the effect the ETAC and ETAC products have had will be difficult. It has also become clear that some of these learning objectives may not be appropriate for the ETAC to have as part of their extension strategy and so the group will have to determine the future of these objectives.

When the ETAC does evaluate its products and services, the focus of their effort should be on the Seed Orchard and Nursery Operators as this is the target audience that has received the most attention. A number of suggestions on how to go about evaluating the activities that have been conducted to achieve the associated learning objectives that the ETAC has identified for this group have been provided.

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ABOUT THIS DOCUMENT

As part of the Extension Technical Advisory Committee's (ETAC's) responsibility to the Forest Genetics Council, a strategic framework is needed to identify goals and audiences for extension, communication, and education activities. This strategic framework is updated annually along with the business plan that identifies and ranks key audiences and goals on which to focus projects in a given year. In 1999, the ETAC developed and initiated this strategic framework. In 2004–05, the ETAC conducted a client needs survey to determine the effectiveness of their extension, communication, and education activities developed under this framework. Based on the results from this survey, the ETAC engaged in a planning process to chart the direction of their activities for the next 3–5 year period of time (Swift and Morford 2005).

In 2008–09, ETAC committed to reviewing its 2005 extension strategy so that recommendations could be made for the evaluation of its programs and products to determine their effectiveness in achieving the planned learning objectives. This document summarizes the review undertaken of the ETAC Extension Strategy and provides some recommendations on future evaluation focus and effort.

This summary report is broken into four sections. The first section explores the changes that have taken place over the past few years at the strategic level where the ETAC takes its direction from. The second section provides a brief environmental scan that looks at the external environment of ETAC's target audiences now as well as the learning objectives that the ETAC used in the development of their 2005 strategy. The third section provides a visual representation of the activities that the ETAC has undertaken to achieve the associated audience-specific learning objectives over the years of the extension strategy. This section is followed up by the final component of the report that provides recommendations and the basic assumptions for future and ongoing evaluation, which includes possible evaluation processes, timing, and methodology.

STRATEGIC DIRECTION CONSIDERATIONS

When looking at the strategic direction for any extension plan, it is important to understand the direction of the organization(s) in which the plan will fit. During the 2005 development of the Extension and Communication Sub-program's Extension Strategy, the existing structure of this sub-program was such that its activities fell within the boundaries of the Forest Investment Council's investment strategy, the Forest Genetics Council, and the BC Ministry of Forests and Range Tree Improvement and Research Branches. Although this structure still remains, the strategic direction of those involved with this structure has changed since 2005. Specifically, the Forest Genetics Council in partnership with the BC Ministry of Forests and Range engaged in a Challenge Dialogue process, which has adjusted the strategic direction for both organizations and subsequently for the ETAC. The Challenge Dialogue and workshop process engaged many representatives of the genetic resource conservation and management community. The result of this process will be the development of a new 2009–2014 strategic plan

for the Forest Genetics Council (available in the spring or summer of 2009) and subsequent business plans for the Council and the BC Ministry of Forests and Range. Although the specific implications for the ETAC have not been clearly articulated yet, it is important that future extension efforts carried out by this group as well as updates to this extension plan be linked to achieving the objectives established in the new strategic plan.

SITUATIONAL ANALYSIS AS OF 2009

The political, environmental, and social environments in which the ETAC finds itself in 2009 is also significantly different than from when the group met in June 2005 to draft its extension plan. As indicated in the previous section, the strategic direction of the Forest Genetics Council itself has adjusted during this time period based on the results from the Challenge Dialogue. There have also been significant changes taking place with many of the ETAC's target audiences as well. Based on the results from 2007 in the Global Forest, Paper & Packaging Industry Survey conducted by PriceWaterhouseCoopers—2008 edition, many of the trends identified as affecting these industries are still playing out in 2009. For example, the credit crisis in the United States (US) continues to exist and has now spilled over into the broader economy of many other countries as well.

According to the PriceWaterhouseCoopers (PWC)—2008 edition survey, there is expected to be an increase pressure on fibre resources as the price of oil increases; emerging markets in Asia, China, Latin America, and Russia grow; and concerns about climate change increase. This fibre supply is also subject to competing demands as a supply for renewable energy and fuels as government policies are put in place to stimulate alternatives to fossil fuels. This has led to localized fibre supply problems and more widespread increases in fibre costs (PWC 2008). Although the Canadian dollar has dropped to below par with the US currency, which has turned exchange rate into a positive for Canadian producers, the demand for products has not followed suit, i.e., demand is still down.

With the US demand for wood products decreasing, and energy and transportation costs increasing, the toll on many forest companies operating in British Columbia has been significant. Most companies are reporting losses, which have resulted in facility closures, acquisitions, and job loss. The outlook for many companies remains poor as they wait for the turning point in the US markets. With this downturn also comes the reality that Canadian forest companies are not reinvesting in their facilities (i.e., their reinvestment ratio is still very low; 0.4 in 2007) (PWC 2008). This reinvestment ratio, calculated as capital investment as a percentage of depreciation, measures the extent that capital investment is replacing aging assets. When forest companies are not investing in replacing their assets, they have a difficult time rationalizing investments in enterprises such as private seed orchards. This trend has been identified by the Forest Genetics Council in a paper presented to Council (Woods 2008). The loss of these private orchards has the potential to significantly affect the Forest Genetics Council's ability to achieve its objective (Woods 2008)—and ultimately the ETAC in achieving one of its learning objectives, “executives will welcome investments in tree improvement.”

Climate change and the policies and regulations associated with it has targeted energy and forests and their areas of focus. Governments from around the world have started to impose rules and regulations to reduce carbon emissions with the result that forest companies are starting to look for options to reduce their energy costs. Some of these imposed rules and regulations are finding their way into various certification systems that govern many of the forest management activities taking place in British Columbia. This trend will likely continue as the issues and effects of climate change sort themselves out.

With the changes in policies and regulations to address the issues of climate change it is important to remember that the forests in which these companies are operating are also changing. The outbreak of the mountain pine beetle is an example of how biology and policy can affect wood supplies and prices. The mountain pine beetle is just one forest health issue that has affected our environment; current data suggests that other forest health agents are also expanding their ranges. Defoliators such as western spruce budworm and tussock moth are on the move as well as other bark beetles (spruce and Douglas-fir) and pathogens such as rusts, blister rusts (western gall rust, and commandra and stalactiform blister rusts), and *Dothistroma* needle blight. These expansions have put some tree species, such as the whitebark pine, at risk in terms of future survival. There is also data to suggest that during times of food shortage, grizzly bears are using seeds from this tree species as a food source, thus affecting the survival of standing trees (significant damage caused by bears climbing the trees) and their growth.

The downturn in the forest industry in British Columbia, the increases in local energy and transportation costs, the implications of climate change, and the mechanisms that the federal and provincial governments have employed to address these issues have all had a significant effect on many of the ETAC target audiences. For many groups, there are now significant constraints on both their time and travel, and an emphasis on reducing costs in whatever way possible. For others, there are job losses or significant reductions in the resources to do their jobs.

Given the current circumstances, it will be important for the ETAC to re-assess their present and future planned activities based on the new reality of their target audiences and determine if the learning objectives are realistic or if new ones need to be developed. The 2005 ETAC plan identifies four priority audiences: executives (which include the BC Ministry of Forests and Range executive, BC Timber Sales executives, CEOs and Vice Presidents of forest companies, and Division Operation Leaders); operational foresters and planners (including timber supply analysts); and seed orchardists and nurseries.

Based on these target audiences, five learning objectives and associated evaluation criteria were generated during the development of the 2005 extension strategy (Swift and Morford 2005), which are presented below. (Note: During the development of the original extension strategy, many of these learning outcomes were drafted, but never finalized to determine their relevance to specific ETAC work. It is suggested that the ETAC review all of these learning objectives and verify if they are still relevant and should continue to be part of their strategy.) (Note: The following problem statements were not part of the original extension strategy, but were drafted by the author to help put the learning objective into context within the original strategy.)

Problem statement 1

The work of the Forest Genetics Council and its partners is largely funded through external sources. It is important that executives who provide this funding be aware of the role improved seed can play in forest management activities and view investing in this area as priority.

Broad learning objectives associated with problem statement 1

- As a result of the work of the ETAC, executives will increase their knowledge of the role of tree improvement in forest management.
- As a result of the work of the ETAC, executives will welcome investments in tree improvement (attitude).
- As a result of the work of the ETAC, executives will maintain or increase their positive attitude towards the role of tree improvement in forest management.

Possible performance indicators of success

- Everyone wants the best seed
- How often tree improvement is referred to in speeches
- Use of tree improvement published materials by executives
- Provincial funding maintained (province and FIA)

Problem statement 2

There has been much published information around the benefits of tree improvement in terms of growth and yield as well as achieving administrative timelines such as free growing and green-up in forest management planning. Many of these timelines are included in assumptions that are built into models that Planners and TSA groups use to develop and schedule forest management activities as well as analyze the results of those activities. The full benefits of using improved seed to achieve these targets, beyond what is captured within the Chief Forester's Standard for Seed Use, however, may not be part of those assessments.

Broad learning objective associated with problem statement 2

- As a result of the work of the ETAC, planners in BC and TSA groups will increase their knowledge about tree improvement and the existence of the Genetic Conservation Catalogue.

Possible performance indicators of success

- Breeders and seed orchards get fewer calls
- Increased number of management units have included improved seed in timber supply analysis

Problem statement 3

When managing natural forests, many operational foresters make the assumption that the trees and plants growing on that piece of ground are diverse in terms of their genetic make-up and get concerned that using improved seed in their reforestation practices may in fact reduce the genetic diversity of the next forest.

Broad learning objective associated with problem statement 3

- As a result of the work of the ETAC, operational foresters will increase their knowledge about genetic conservation concepts (finding assurance that they are not making a bad decision).

Possible performance indicators of success

- Increased collaboration with the Gene Conservation Technical Advisory Committee (TAC)
- Increased hits on the website
- Change in survey results

Problem statement 4

There are many planning activities that operational foresters engage in to achieve their regeneration obligations. They also participate in strategic silvicultural planning activities (silviculture strategies) that help prioritize reforestation activities in the future. One of the factors that can come into play in achieving some of the objectives of these silvicultural strategies is the use of improved seed.

Broad learning objective associated with problem statement 4

- As a result of the work of the ETAC, operational foresters will want improved seed (attitude).

Possible performance indicators of success

- Fewer angry responses
- More calls for seed (best)
- Look for changes in attitude by extracting user data from the Seed Planning and Registry System [SPAR]); for example, those that are complying with the Chief Forester's Standard would rank a certain level (say 5), and if they request 20% over this standard (say 7 or 8), this would indicate a change in attitude
- Compliance and enforcement with standard—fewer violations recorded

Problem statement 5

Those managing seed orchards and nurseries that produce the seed and seedlings from improved seed grown in these orchards, need to main or enhance their skills in producing a quality product to meet the demands of the industry.

Broad learning objective associated with problem statement 5

- As a result of the work of the ETAC, seed orchardists and nurseries will increase their knowledge and skills of management practices to increase their yield of improved seed.

Possible performance indicators of success

- # of viable seeds/kg of seed (increase in yield and quality)
- Increased use of the ETAC products by seed orchard and nurseries

- Say they have knowledge and skills
- Observe skills
- Applying new skills

THEMATIC EXTENSION STRATEGIES FROM 2005–10

Over the past 4–5 years, the ETAC has developed various extension products to address the problem statements and learning objectives listed above. What follows are a series of matrices that ties the ETAC products to their learning objectives.

Problem statement 1					
The work of the Forest Genetics Council and its partners is largely funded through external sources. It is important that executives who provide this funding be aware of the role improved seed can play in forest management activities and view investing in this area a priority.					
Broad learning objectives for problem statement 1					
<ul style="list-style-type: none"> • As a result of the work of the ETAC, executives* will increase their knowledge of the role of tree improvement in forest management (<i>By how much? 10%? What is the target?</i>). • As a result of the work of the ETAC, executives will welcome investments in tree improvement (attitude). • As a result of the work of the ETAC, executives will maintain or increase their positive attitude towards role of tree improvement in forest management (<i>Target?</i>). <p>* Executives refers to executives within the BC Ministry of Forest and Range, BC Timber Sales, Vice Presidents and CEO's of forest companies, and Division Operation Leaders.</p>					
Possible performance indicators of success					
<ol style="list-style-type: none"> 1. Everyone wants best seed (<i>Increase in orders for select seed received by SPAR?</i>) 2. How often tree improvement is referred to in executive speeches 3. Use of material by executives—requests for information, number of downloads of material, etc. 4. Provincial funding maintained (Province and Forest Investment Account) 5. Continued financial support for existing tree improvement facilities 6. Executives will say they support tree improvement 					
YEAR					
	2005–06	2006–07	2007–08	2008–09	2009–10
Focus of change/year	Awareness	Awareness	Awareness	Awareness	Awareness
Priority topic Basic tree improvement information	Tree improvement in BC brochure	Tree improvement in BC poster		Booth at BC Woodlot AGM	FGC display development and production

Problem statement 2

There has been much published information around the benefits of tree improvement in terms of growth and yield as well as achieving administrative timelines such as free growing and green-up in forest management planning. Many of these timelines are included in assumptions that are built into models that Planners and TSA groups use to develop and schedule forest management activities as well as analyze the results of those activities. The benefits of using improved seed to achieve these targets, however, may not be part of those assessments.

Broad learning objective for problem statement 2

- As a result of the work of the ETAC, planners in BC (public and private, industry and consultants) and TSA groups will increase their knowledge about tree improvement and the existence of the Gene Conservation Catalogue (*Target?*).

Possible performance indicators of success

1. Breeders and seed orchards get fewer calls about gene conservation (*The subject of these calls was not identified in the original plan—this needs to be clarified*)
2. Increased number of management units that have included improved seed in timber supply analysis (*What is the baseline now?*)

YEAR

	2005–06	2006–07	2007–08	2008–09	2009–10
Focus of change/year	Awareness	Knowledge	Knowledge	Knowledge	Awareness
Priority topic Conservation of whitebark pine	Tree improvement in BC brochure	Tree improvement in BC poster	Whitebark pine workshop Whitebark pine backgrounder	Whitebark pine bulletin Whitebark Pine Ecosystem Foundation AGM and field tour White Pine mini workshop Booth at BC Woodlot AGM	FGC display development and production

Problem statement 3

When managing natural forests, many operational foresters make the assumption that the trees and plants growing on that piece of ground are diverse in terms of their genetic make up and get concerned that using improved seed in their reforestation practices may in fact reduce the genetic diversity of the next forest.

Broad learning objective for your extension plan

- As a result of the work of the ETAC, operational foresters will increase their knowledge about genetic conservation concepts (finding assurance that they are not making a bad decision).

Possible performance indicators of success

1. Increased collaboration with gene conservation Technical Advisory Committee
2. Increased hits on the Gene Conservation website at UBC (whose website was not stated in original plan)
3. Change in client needs survey results

YEAR

	2005–06	2006–07	2007–08	2008–09	2009–10
Focus of change/year	Awareness	Knowledge	Knowledge	Knowledge	Awareness
Priority topic Gene conservation				Coastal extension at UBC	Conservation/ climate change poster

Problem statement 4

There are many planning activities that operational foresters engage in to achieve their regeneration obligations. They also engage in strategic silvicultural planning activities (type 1 or 2 silvicultural strategies) that help prioritize reforestation activities in the future. One of the factors that can come into play in terms of achieving some of the objectives of these silvicultural strategies is the use of improved seed.

Broad learning objective for your extension plan

- As a result of the work of the ETAC, operational foresters will want to purchase and use improved seed (*Attitude*) (*Target? FGC target?*).

Possible performance indicators of success

1. Fewer angry responses (*From whom to whom, about what? This needs to be clarified.*)
2. More calls to purchase or procure seed (*Best*)
3. Ask people about attitude (extract user data from SPAR)(CF Standard = 5; Are they requesting 20%? Over 5 = buy in
4. Fewer violations recorded around compliance and enforcement compliance with Chief Forester's Standard

YEAR

	2005–06	2006–07	2007–08	2008–09	2009–10
Focus of change/year	Awareness	Awareness	Awareness	Knowledge/ Skills	Awareness
Priority topics	Interior spruce embling demonstration site NFR	Prince George field tour	ABC FP article on forest genetics research	CSC summer workshop	Field tour including deer resistance to cedar
Chief Forester's Standard					
Species migration/ usage outside of existing boundaries	Chief Forester's Standards for Seed Use training (Ministry role and delivery)				
SPAR					

Problem statement 5

Those managing seed orchards and nurseries that produce the seed and seedlings from improved seed grown in these orchards need to maintain or enhance their skills in producing a quality product to meet the demands of the industry.

Broad learning objective for your extension plan

- As a result of the work of the ETAC, seed orchardists and nurseries will increase their knowledge and skills of management practices to increase their yield of improved seed (*Target?*).

Possible performance indicators of success

1. Increase in # of viable seeds/kg of seed (increase in yield and quality) being produced
2. Increased use of the ETAC products by seed orchard and nurseries
3. Seed orchard and nursery operators say they have knowledge and skills
4. Third-party observation of skills being applied (review of annual reports, interviews with seed orchard and nursery operators, observation/documentation of activities by third-party audit)

YEAR

	2005-06	2006-07	2007-08	2008-09	2009-10
Focus of change/year	Awareness	Knowledge	Awareness	Knowledge	Knowledge
Priority topics	Effect of GA3 inductions on male and female cone production and seed quality in western redcedar Reproductive biology of lodgepole pine Crown management workshop Tree seed biology workshops TICtalk publication	Interior pollen workshop Pli and Pw extension notes Spruce manual? Colourized conifer reproductive cycle diagrams TICtalk	TICtalk	Anatomy and morphology of conifer tree seed Reproductive biology of western larch Tree seed workshops Seed use workshops (same as above?) Coastal crown management workshop MPB seed orchard workshop FGC Extension Note #9: Increasing quality of seed production in western redcedar orchards	Whitebark pine and seed orchard pest templates and publications Cone induction workshop CLRS Coast history final get together Seed orchard poster Pest workshops coast/interior White pine mini conference?

				BCSOA Pest monitoring workshop Cone induction workshop Coastal history of TI/FG meet and greet session <i>TICtalk</i>	
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EVALUATION FOR 2009–10

In 2004–05, the ETAC conducted a client survey to help evaluate their existing extension products and services as well as to identify information gaps that needed to be addressed as the committee moved forward in the development of their next extension strategy. The results of the survey provided the planning team with valuable information regarding which products were being used and which were not, as well as information about the survey methodology itself. These lessons need to be used as the ETAC approaches its next evaluation process.

In 2009–10, the ETAC plans to conduct further evaluation work to determine the effectiveness of their extension effort over the past 4–5 years. Before proceeding with this evaluation, it will be important for the ETAC to consider the following:

- During the development of the extension strategy, there were various groups participating in its development. As a result, there may have been learning objectives included in the strategy that were not specific to the ETAC itself and so could cause confusion in any subsequent evaluation process. Suggestions on how to address this issue will be presented in the recommendations.
- Not all extension work needs to be formally evaluated and so the ETAC may want to consider prioritizing the audience and products/services that they wish to collect information on. This would avoid the dilemma that the ETAC experienced with its 2004–05 survey where all products were evaluated by all audiences whether that activity/product was geared towards all audiences or not. This led to some rather inconclusive results.
- Upon review of the learning objectives and extension activities it becomes apparent that the primary focus of many of the materials and activities designed and developed by the ETAC have centered on the seed orchardists and nurseries target audience. Targeting this group may have been intentional as they are the primary source of the “product” developed for the Forest Genetics Council, or it may have been accidental. From the amount of effort focused on the seed orchard and nurseries target audience, it would seem appropriate to focus a more detailed evaluation on this group and leave the other target audiences for a less formal process or perhaps no evaluation at all.
- Although planners and operational foresters were also listed as target audiences, the existence of the Chief Forester’s Standards for Seed Use ensures that they must include improved seed as part of their decision-making process. This fact was verified in the 2004–05 survey where license holders were more aware of and wanted access to information that supported this standard. A review of the activities that have taken place over the past 4–5 years has indicated that a limited amount of effort has gone into achieving the learning objective identified for this group. In terms of using this group as part of the sample frame for future program evaluations, it is reasonable to assume that their awareness of activities other than those that focus on SPAR and the compliance to the Chief Forester’s Standards for Seed Use would be limited. It is suggested that any follow-up evaluation focus on SPAR, and that compliance with the Chief Forester’s Standards for Seed Use be conducted by the BC Ministry of Forests and Range as this falls within their mandate rather than the ETAC’s.

- The same argument presented above can also be used for the “planner in BC and TSA groups” target audiences. With the limited amount of effort that appears to have been invested in the transfer of information to address the designated learning objective associated with this group, what information would the ETAC be seeking? A clear rationale for including these target groups in any detailed follow up evaluation would have to be made (see recommendations section).
- With the Forest Genetics Council Strategic Plan and subsequent Business Plan not due for release until April 2009, it would be important for the ETAC to determine its role within the context of this new plan. If that role is not clear then time should be spent clarifying it so that future evaluations could be used to gather information on the knowledge gaps associated with this new direction, or include new target audiences if they are identified in the plan.

Recommendations for upcoming evaluation

Based on the 2004–05 evaluation of the ETAC extension strategy, it is suggested that the ETAC consider the following:

1. To determine the effectiveness of programming by the ETAC for the past 3–5 years, the evaluation should focus primarily on the seed orchard and nurseries community. Since the evaluation effort should fit the programming effort and as this audience received the most attention during the planning period, they should also receive the most evaluation effort as well.
2. If the evaluation is to be focused on the seed orchard and nurseries then the ETAC should review the list of possible performance indicators of success and select the most appropriate mechanism to collect that information. For example, if the ETAC is looking to verify that the target audience is doing something different (evaluating knowledge and skills) based on the various workshops and skills sessions provided to this group, one of the methods to use would be to do a follow-up survey of those who attended the various workshops to see if they are doing something different based on their participation. This follow-up survey could be done via electronic survey (such as Survey Monkey, if cost was an issue) and/or telephone survey or interviews if the sample population is small. Interviews are being suggested as they can capture “the story” that can be either positive or negative as both provide powerful important learning for the ETAC. Another example could be if the ETAC wanted to determine what products are being used by seed orchards and nurseries, one method might be to include a survey in *TICtalk* as this publication is being used by this community. The survey could be sent as part of the publication with a stamped return envelope attached, or on the website where *TICtalk* is housed and downloaded if that is the communication mechanism of choice. Another option could be to conduct a portfolio review—a review of the collection of materials that are available at seed orchards and nurseries to see if the published material produced by the ETAC is available and in use.
3. Evaluating activities associated with Problem statement 1 will be challenging for the ETAC as there are a number of other groups associated with the Forest Genetics Council that are linked to this problem statement. It is still unclear if executives are a true target audience for the ETAC and so it is suggested that the ETAC either re-evaluate its extension strategy and associated activities related to this learning objective

- to identify the true learning objective associated with this audience and redraft it or eliminate the audience and learning objective altogether from its plans and activities.
4. With the development of the Whitebark Pine Ecosystem Foundation it appears that the ETAC has certainly contributed to moving the efforts of genetic conservation forward in this specific area. An evaluation of participants who attended the Whitebark pine workshop would determine if planners and operational forests (the target audiences associated with the gene conservation learning objectives) were engaged in the process. The learning objectives associated with Problem statements 2 and 3 also seem to be ones likely to need revision based on the new Forest Genetics Council Strategic Plan and Business Plan as there is a strong focus on resource conservation based on the Challenge Dialogue report. As with recommendation 3, linking audience change to the ETAC activities versus those of other conservation groups within the Forest Genetics Council would be difficult to sort out and so any evaluation of activities would need to deal with this interaction. One method that could potentially do this would be the development of a case study that would provide the in-depth examination of this particular change and provide a complete picture of how it came about.
 5. As indicated earlier, evaluating activities associated with Problem statement 4 will present challenges for the ETAC. In the previous survey results, most of this target audience, planners and operational foresters, focused their attention and learning on products associated with helping them achieve their legal obligations under the Chief Forester's Standards for Seed Use. It is suggested that the ETAC review this learning objective and either restate it to identify what will be different based on the ETAC activities rather than those conducted by the BC Ministry of Forests and Range or if this learning objective should be eliminated completely from the strategy.
 6. Finally, in the extension strategy developed in 2005, a number of opportunities/partnerships were identified for the ETAC to take advantage of in support of their extension effort. Perhaps as part of the upcoming evaluation there should be some discussion on how successful the ETAC has been in using these other mechanisms to achieve their learning objectives and/or reach their target audiences.

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