



BC Beekeeping Industry

Strategic Plan

**Submitted to:
BC Investment Agriculture Foundation
Agri-Food Futures Fund**

May, 2004

**by Strategic Planning Committee
BC Honey Producers Association**

1 ACKNOWLEDGEMENTS

The Strategic Planning Committee is pleased to present this report on behalf of the beekeeping industry and the beekeepers of British Columbia. Comments and enquiries about the report should be directed to the President of the British Columbia Honey Producers Association as indicated below.

The British Columbia Honey Producers Association and the Strategic Planning Committee would like to thank the Investment Agriculture Foundation and the Agri-Food Futures Fund for their financial support in the preparation of this report. Thanks are also extended to the members of the industry who attended meetings and gave willingly of their time and knowledge to make this plan possible. The Board of Directors of the Association and members of Central Executive were also helpful and supportive. There is now much to do. However, there is a sense of optimism about the future of this industry. The stage is set to continue the development of a strong and viable beekeeping industry in British Columbia.

The suggestions and conclusions in this report were reached using the knowledge and experience of producers involved in the industry. The report was prepared by Don Cameron Associates on behalf of the Strategic Planning Committee. Members of the industry extend their thanks to Don Cameron Associates.

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2 SUMMARY

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The British Columbia (BC) beekeeping industry is comprised of approximately 2,200 producers operating some 43,000 honeybee colonies throughout the province.

Beekeeping is practiced in all agricultural areas and in selected forest areas with seasonal nectar and pollen sources.

Many beekeepers in BC operate 20 colonies or less while only a few operate in excess of 1,000 colonies. The average operation size in BC is 19 colonies, compared to 77 in Saskatchewan and 293 in Alberta.

Across the province there are over 30 local beekeeper clubs and associations, many of which are affiliated with the British Columbia Honey Producers Association (BCHPA). The BCHPA is the recognized beekeeper organization in the province and represents BC producers at national and international meetings. The BCHPA has a membership of approximately 500 producers who operate over 85% of the colonies in the province.

This Strategic Plan (SP), developed by the Strategic Planning Committee (SPC), addresses the future of the beekeeping industry by assessing the position of the industry at this time and identifying the vision, goals and strategic directions for the future. The SP also includes:

- options for action
- timelines for a three-year implementation
- an implementation strategy, including strategies for achieving the funding needed to lead to eventual industry self-sufficiency.

2.1 VISION AND GOALS

The following is the **vision** for the future of the beekeeping industry in BC:

The BC beekeeping industry, producing pure and healthy products, will remain a viable and sustainable industry by supporting necessary research, increasing awareness of the industry, expanding market avenues and market share, increasing partnerships with other agricultural sectors, ensuring necessary training and education for producers, and increasing the emphasis on communication and cooperation among producers.

The **main goals** of the BC beekeeping industry are to:

- *Enable beekeepers to access training and develop expertise*
- *Increase market share for BC beekeepers in all product categories*

- *Improve communication, and encourage more cooperation, among beekeepers*
- *Demonstrate to both the general public and other segments of the agricultural industry, the economic value and significant contribution of the beekeeping industry to other agricultural industries and the overall provincial economy.*

2.2 STRATEGIC DIRECTIONS

Discussions and meetings were held with industry representatives prior to the writing of the SP. Four key strategic priorities or directions emerged from these discussions:

- 1) Research and Disease Prevention
- 2) Marketing and Quality Guidelines
- 3) Industry Communication
- 4) Training and Education.

Within each of the four areas, a series of optional actions was discussed. More detail on these action plans is identified in “The Future of the Industry” section in this Plan.

Research directly related to the beekeeping industry in BC has been done but the capacity for ongoing BC-specific research has been hampered by staffing changes and available funding. The beekeeping industry in BC has much in common with the industries in other provinces and countries. The industry can access research from other jurisdictions using sources like the International Bee Research Association and can contribute knowledge and expertise in partnership with other beekeepers in Canada and elsewhere.

The consuming public expects appropriate quality and safety guidelines for the production of agricultural products. A system for tracking products (“trace back” system) produced by individual beekeepers will be part of the quality and safety measures developed. In addition to the expected benefits from appropriate quality guidelines that relate to food product safety, the development of quality production guidelines was also recognized as relevant to marketing efforts. A marketing strategy will position the industry for increased market share in all product categories.

Increasing communication among producers in the industry was considered to be an important way to achieve the goals of the SP. Better communication was considered to be necessary for overall industry development as it can lead to greater support and consensus on key industry issues such as internal provincial bee movement policy. The industry website and newsletter will be the main tools used to increase communication with beekeepers in all parts of the province.

Producer training and education was considered to be important for the industry, particularly because of the wide variety of production practices and the involvement of the industry with other agricultural sectors through crop pollination. Work on this will begin with a series of provincial workshops combining education and training opportunities with promotion of the sector and awareness of this SP as a contributor to industry development.

3 INTRODUCTION

The groundwork for the development of this SP began some three years ago when the opportunity for industry development funding was made available through the BC Investment Agriculture Foundation (BCIAF). Early efforts to develop the SP were hampered by the nature of the industry. There are many producers operating on a part-time basis, and with busy schedules, it was difficult to hold meetings.

The sector was facing numerous issues including how to obtain increasing market share, how to improve industry communications, and issues related to bee movement in the province, for example.

Attracting new entrants to the industry has also been difficult despite the relatively low capital investment required and relative ease of entry to the industry.

4 THE PROCESS FOR PLAN DEVELOPMENT

This Plan was developed by the SPC in consultation with BC beekeepers.

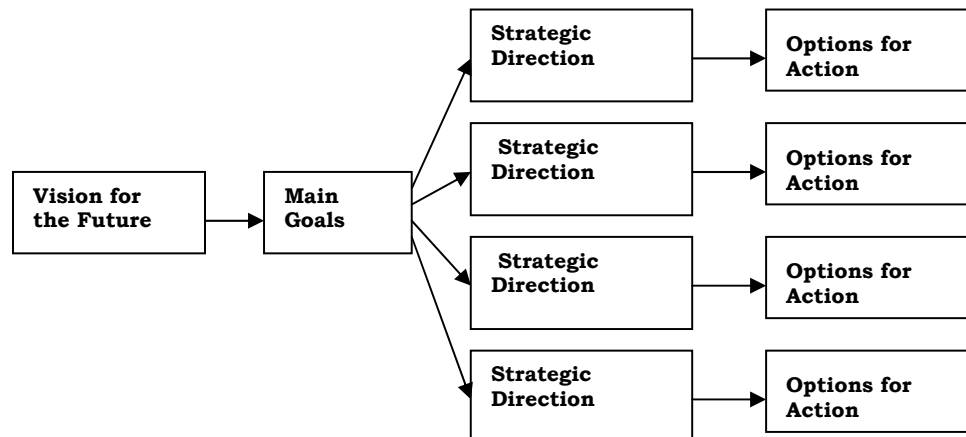
4.1 THE IMPORTANT PLANNING QUESTIONS

In developing this SP for the industry, the following questions were addressed.

- A. Where has the industry been? Where is it now?
- B. Where does the industry want to go?
- C. How is the industry going to get there?
- D. How will the industry know when it has arrived?

4.2 RELATIONSHIP BETWEEN PLANNING TERMS

To ensure clarity in the use of the plan, the following relationship between the main planning terms was applied:



The *Vision for the Future* captures the overall vision for where the industry wants to be over the long term.

The *Main Goals* are building blocks for the vision.

The *Strategic Direction Areas* emerge from the Main Goals. They are the broad categories within which actions are developed.

The *Options for Action* are derived from the strategic direction areas. Actions are the more specific activities that the industry will implement to realize the long-term vision.

4.3 STEPS IN DEVELOPING THE PLAN

The following steps were used to develop this SP:

- 1) Establishment of the SPC
- 2) Retention of the facilitator and development of Draft One of the SP
- 3) SPC meeting on January 15, 2004 in Kelowna
- 4) Development of Draft Two of the SP
- 5) Review of Draft Two with the SPC, primarily by email and telephone
- 6) Notice of the SP to the entire BC industry (over 2000 mailed) including a Summary of the SP and request for feedback, comments and critical review
- 7) Review of industry comments and incorporation into the SP, as appropriate
- 8) Review of the SP with BCMAFF contacts and contacts involved with the BCIAF and Agri-Food Futures Fund (AFFF) with reference to the Agri-Food Futures Initiative for the bee industry
- 9) Workshop on the SP at the semi-annual meeting of the BCHPA (March 6, 2004) to review the SP and receive further input and suggestions
- 10) Support for the SP at the March 6 meeting and resolution to accept, "in principle" the SP as appropriate for the industry
- 11) Adjustment of the SP as required, based on industry input from the March workshop and further review with the SPC;
- 12) Presentation of the SP to the BCHPA Central Executive
- 13) Refinement and adjustment of the SP as required
- 14) Presentation of the SP to the BCIAF as the plan for industry development.

5 BACKGROUND AND CURRENT SITUATION

5.1 MAIN INDUSTRY COMPONENTS

5.1.1 The BC Beekeepers

The BC beekeeping industry is comprised of approximately 2,200 producers operating some 43,000 honeybee colonies throughout the province. Most beekeepers in BC operate 20 hives or less while only a few operate in excess of 1,000 hives.

Many producers concentrate on local markets and may distribute product from the farm gate or at local farmers' markets. Producers with more than 20 hives may sell provincially with concentration in their local market areas. Several larger producers are also industry packers. There is an export market being addressed by the larger producers in BC.

The industry is also an important contributor to other agricultural sectors in BC through pollination contracts which are obtained from specific sectors such as the orchards and the fruit and berry sectors. These pollination services carry an average fee of \$60. In 2003, there were almost 46,000 services valued at more than \$2.7 million. Little specific knowledge is available on the economic contribution of the industry to other agricultural sectors and to the provincial economy, although estimates have been made. It has been estimated that BC pollination contracts are responsible for more than \$160 million annually in agricultural production, while the total market value of hive products may be only about \$8 million annually.

5.1.2 The BCHPA

The purposes of the BCHPA are:

- *Promoting and encouraging the keeping of bees using the most suitable methods for their effective management*
- *Disseminating reliable and practical information of interest to beekeepers*
- *Promoting public knowledge of beekeeping through education programs, exhibitions and sponsorship of beekeeping instruction*
- *Promoting the role of bees in agricultural pollination*
- *Representing the interests of British Columbia beekeepers with the provincial and federal governments*
- *Providing forums for debate, information exchange and fellowship among its members.*

The BCHPA is the only recognized Association of beekeepers in the province. The BCHPA membership stands currently at about 500 but there are an estimated 2200 beekeepers in the province, many being hobbyists and small operators with 20 hives or less. Producers within the BCHPA membership account for more than 85% of the provincial honey production.

Across the province there are over 30 local beekeeper clubs and associations many of which are affiliated with the BCHPA. The BCHPA represents BC producers at national and international meetings.

5.2 MAIN PRODUCTS OF THE INDUSTRY

The industry produces honey as a primary product but it is also involved in production of queens and bee stock used by other beekeepers. As noted below, using honey bees for pollination of other agricultural crops is a very significant economic component of the industry.

5.2.1 Honey

BC honey production annually is about 3.5 million pounds. Canadian beekeepers produced about 74 million pounds of honey in 2003. Production levels in BC have been somewhat constant over the last several years. Honey prices remain stable and competitive.

5.2.2 Queens and Bee Stock Production

The demand for queens and bee stock is considered to be high, particularly in areas of BC where climate conditions make over-wintering of bees difficult and hives may need to be replaced each year. Currently, the import of bees from the continental U.S. has been restricted but bees are allowed from Australia, New Zealand and Hawaii.

Discussions with BC beekeepers indicate the current demand for queens and bee stock cannot be met.

5.2.3 Pollination

Pollination is generally considered to be the most important agricultural function of honeybees. In the United Kingdom, the value of pollination to the agricultural industry is considered to be 10 times greater than the value of honey products. Studies in BC have shown that honeybee pollination may be responsible for more than \$160 million annually in agricultural production, while the total market value of hive products may be only about \$8 million annually. In Canada, the value of honeybee pollination is estimated at over \$1 billion per year.

5.2.4 Pollen, Propolis and Wax

Bee pollen is a pure food which contains vitamins, amino acids, minerals, trace elements, hormones, enzymes, carbohydrates, and protein. Bee pollen is promoted as an important health food.

Propolis is a resinous substance used by bees to patch and disinfect the hive. It is promoted as an aid in helping to build immunity and resistance to ulcers, colitis, colds, stress, periodontal problems, laryngitis and aging.

Beeswax is a versatile and functional product often used in the making of candles. Natural beeswax has several unique properties such as its sweet smell, it does not give off black smoke as it burns, and it burns slowly due to its high melting point.

Only preliminary data is available on the economic value of these products within the overall industry and the data inputs are too small to make any estimates meaningful at this time.

5.3 THE MAIN ISSUES, STRENGTHS AND WEAKNESSES OF THE INDUSTRY

5.3.1 Main Issues, Problems and Concerns

The BC beekeeping industry has been unfocused to some extent. Because of the variety in production methods and the range in size of operations from larger producers with more than 1000 hives to smaller producers with 20 hives or less, it has been challenging to maintain a cohesive voice on important industry issues.

The need to attract young people to the beekeeping industry was identified as an important issue. Similar to other agricultural industries, there is an ongoing need to promote the opportunities available in primary agricultural production.

Disease control and management is an important issue for the entire industry. Because of relatively low industry entry costs, it is quite possible for virtually anyone in the province with an interest in bees to be a beekeeper as long as they adhere to local bylaws and regulations.

Some beekeepers, particularly those beekeeping in parts of the province where climate conditions make over-wintering of bees difficult, for example, cannot obtain adequate supplies of queens. Having enough bee stock available to meet the demand is a general problem in the industry.

The absence of reliable data to capture the economic contribution of beekeeping to the provincial economy is a problem. Other agricultural sectors rely on the industry for pollination yet little is known about the dollar value of that contribution. This deficiency in essential “benchmarking” information was identified as an important gap for effective planning.

5.3.2 Strengths of the Industry

The BC beekeeping industry has knowledgeable and experienced beekeepers. Industry participants are generally committed and dedicated to the production of products that limit, or eliminate altogether, reliance on chemical inputs. Industry members see the industry positioned as a producer of pure and healthy products with value-added opportunities.

Returns to beekeepers, through constant product prices, are considered strong at this time. There are signs of demand for the industry's products within all product categories.

The BC climate may provide strengths for the industry in many areas of the province. The generally mild climates of the Lower Mainland, the Okanagan, Creston Valley and Vancouver Island present the industry with stable climates for over-wintering of bees as long as excessive moisture problems are controlled.

The abundance of fruit crops in the province is a strength for the pollination side of the industry and this strength can result in an industry opportunity. Indeed, for some crops, notably cranberries, there may be almost complete dependence on honey bees for pollination. Because cranberries provide low nectar and pollen yields, cranberry growers must increase the number of honey bees per acre, adding more pollination contract opportunities for beekeepers.

The industry has generally been well-represented by the BCHPA. The Central Executive is enthusiastic about the potential for the industry in the province, as are other beekeepers participating on industry committees. The industry is also well served by a series of beekeeping Clubs across the province, many of which are active and committed to their local membership.

5.3.3 Weaknesses of the Industry

The lack of communication among BC beekeepers was identified as a weakness. Electronic communication capacity remains fragmented as many producers are not actively "on line".

There are some differences among producers related to the realities of production. Some producers, for example, rely more heavily on imported queens and bee stock because of climate and a relatively short "window" for honey production. Producers in other parts of the province do not have the same climate pressures and over-wintering is easier. They have less need for queens and bee stock. Different perspectives among producers on import issues and the movement of bees within the province, and from other provinces, will require ongoing discussions among producers in the industry.

5.3.4 Threats to the Survival of the Industry

The potential for producers to cause disease outbreak, or create consumer backlash from the production of an unhealthy product, emerged as important threats to the industry.

Because of its potential impact on forage for bees, ongoing urbanization was also identified as a threat to the industry. This threat was coupled with the general concern about stresses in other parts of the agricultural industry, specifically the tree fruit and berry sectors. Should these sectors decline, then important pollination opportunities that now exist for beekeepers would be reduced or lost.

Because of the nature of the industry, the presence of diseases and pests is a constant concern. The lack of research capacity to study diseases was identified as a threat. Weak communication channels available to share the results of bee disease research were discussed as an additional threat to the industry.

The apparent lack of new entrants to the industry may threaten its ongoing health and stability. Finding qualified help for beekeepers is a problem and some beekeepers are pressured by the need to find someone to take over their businesses as they reach the age when they wish to retire from active beekeeping.

5.3.5 Opportunities for the Industry

Whether the glass of water is half full or half empty is an appropriate question for this industry. Discussions with industry representatives identified product demand beyond existing supply within virtually every product category of the industry including direct honey sales to consumers, the export market, bee stock production and pollination. Low industry entry costs and the production of healthy and pure products positioned to capitalize on consumer preferences for this type of product combined to suggest opportunities for new entrants to the industry.

There are opportunities for value-added products including products related to the health care sector. Products such as lotions present a market opportunity and there are potential niche markets with specialized honey products combined with popular fruits.

Other selected product opportunities were identified, including the development of gift packages using honey coupled with other BC products. Honey is a popular food product that may combine well with tea and lemon to create a healthy and nutritious drink. Honey and rum is also a popular drink that may be promoted within selected markets. Honey cookbooks are popular and more recipes using honey could be developed and marketed.

Many consumers in BC prefer to buy agricultural products from BC farmers, assuming generally competitive prices and product quality. This factor presents a further marketing opportunity for BC honey producers.

Agri-tourism may present opportunities for beekeepers. It has been observed that young people have an interest in bees because they are considered to be exciting to watch. Promoting farm tours may present opportunities for producers to educate consumers and gain income themselves by charging a fee for the tours.

Some beekeepers are becoming increasingly involved with direct farm marketing and farm gate sales. Generally speaking, if important issues of food safety and quality are addressed, sales at the farm gate may provide a higher return to the producer than selling wholesale. Being able to sell more products at the restaurant level was also identified as an opportunity.

6 THE FUTURE OF THE INDUSTRY

6.1 POTENTIAL IMPACT OF THE INDUSTRY

This SP identifies the need for more substantial industry profile work to support what potential there might be in beekeeping. There would appear to be demand for all of the main product categories of the industry, prices for industry products are currently solid, and since BC still remains a net importer of honey products, there may be opportunities for BC beekeepers to increase their market share.

Between 1992 and 2001, the economic growth in honey as a commodity in BC was 172 percent and honey has been identified as the fifth highest growth commodity in a list of 25 high growth commodities in the province.

Although dependent upon the health and stability of other agricultural sectors such as berries and tree fruits, the pollination category of the industry is also an area of potential growth. It is estimated that BC pollination is responsible for more than \$160 million annually in agricultural production, while the total market value of hive products may be only about \$8 million annually. In Canada, the value of honeybee pollination is estimated at over \$1 billion per year.

6.2 VISION AND GOALS

The following is the vision for the future of the beekeeping industry in British Columbia:

The BC beekeeping industry, producing pure and healthy products, will remain a viable and sustainable industry by supporting necessary research, increasing awareness of the industry, expanding market avenues and market share, increasing partnerships with other agricultural sectors, ensuring necessary training and education for producers, and increasing the emphasis on communication and cooperation among producers.

The main goals of the BC beekeeping industry are as follows:

- *Enable beekeepers to access training and develop expertise*
- *Increase market share for BC beekeepers in all product categories*
- *Improve communication, and encourage more cooperation, among beekeepers*
- *Demonstrate to both the general public and other segments of the agricultural industry, the economic value and significant contribution of the beekeeping industry to other agricultural industries and the overall provincial economy.*

6.3 STRATEGIC DIRECTIONS AND OPTIONS FOR ACTION

There were four key strategic directions identified for this SP. Within each strategic direction, some possible actions were identified. This was designed to provide readily available project options in order to capitalize on momentum to implement the SP.

6.3.1 Research and Disease Prevention

Bee diseases are a major threat to the beekeeping industry and appropriate information about research on diseases was considered important for the future of the industry and for ongoing industry development. There is also a need to distribute disease prevention information to the industry members using the improved industry communication suggestions identified in this SP.

It was recognized that it may be difficult to fund BC-specific research even though there is research capacity in the province. Important contributions in research have been made by BC Universities over the past few decades and work is continuing. There may also be opportunities to contribute to research in cooperation with other industries and commodity groups. Working in partnership with other agricultural sectors was considered important in order to widen the relevance of the research and encourage sharing of costs.

The need for the industry to access research from other jurisdictions was recognized. Much knowledge and expertise may be available easily from areas such as the International Bee Research Association based in the United Kingdom and the new North American Institute for the Study of Pesticides and Bees at the University of Montana in Missoula.

A suggestion was made to identify honey and beekeeping as a category or grouping to allow the industry to more easily qualify for selected federal government research opportunities.

Developing more capacity to remain abreast of current relevant research was considered important. Establishing this capacity for the industry will be an important thrust to be accomplished with the implementation of this SP.

Some Options for Action

- 1) As a first step to address this strategic direction, it was considered important to establish a committee on research for the industry. This committee can assemble research findings, as applicable, and can represent the BC industry on broader national and international committees where required. The committee will:
 - Identify important questions for the BC industry that may be answered by appropriate research
 - Commission studies to identify relevant research already related to the identified questions for the BC industry
 - Identify research gaps for the BC industry

- Seek partnerships with other provinces and the Canadian Honey Council and others to commission targeted research studies and programs
 - Identify other research opportunities through discussion with research bodies such as BC Universities, federal government programs, the Canadian Agricultural Research Council and others.
- 2) Varroa destructor is a serious threat to honey bees and could have extensive implications for honey production, as well as pollination. Work with other provinces, the BC Bee Breeder Association, and the Canadian Honey Council, should be continued to encourage ways to develop varroa resistant bee stock.

6.3.2 Marketing and Quality Guidelines

There was considerable discussion about the need for an increased provincial marketing effort for the BC beekeeping industry. One of the first tasks will be a full review of the industry and the development of an appropriate marketing strategy and plan. This work will include the development of a more complete industry profile, including current volumes of production in all beekeeping industry categories and appropriate consumer sales estimates for BC, and for national and international markets. The industry profile is expected to provide detailed estimates of the economic benefits of beekeeping (primarily through pollination) to other agricultural sectors notably tree fruit and berry crops.

Numerous ideas and suggestions were advanced that will be explored further when developing the marketing strategy.

There was considerable discussion among beekeepers on the topic of apiary inspection and the role of inspection services. Many beekeepers wish to retain current BCMAFF inspection services while others question the need for inspection, or advance the option of inspection being managed and controlled by the industry itself.

The consuming public expects appropriate quality and safety guidelines for the production of agricultural products. A system for tracking products (“trace back” system) produced by individual beekeepers will be part of the quality and safety measures developed. In addition to the expected benefits from appropriate quality guidelines that relate to food product safety, the development of quality production guidelines was also recognized as relevant to marketing efforts. A marketing strategy will position the industry for increased market share in all product categories.

This discussion about product safety and quality also included the Canadian On Farm Food Safety (COFFS) initiative and the provincial initiative for Food Quality and Food Safety (FQFS). The Canadian or federal initiative is presently a voluntary one providing basic minimum standards of production and traceability on the product produced. To participate, a beekeeper’s site must become a “registered establishment” under the honey regulations of the Canada Agricultural Products Act. The provincial FQFS initiative is currently in the developmental stages but a management Committee has been established and the initiative is prepared to accept project applications.

In addition to the expected benefits from appropriate quality guidelines that relate to food product safety, the development of quality production guidelines was also recognized as relevant to marketing efforts. A marketing strategy will position the industry for increased market share in all product categories. Having quality production guidelines and industry standards is the first important step in future marketing efforts.

The beekeeping industry will also support the Environmental Farm Planning Initiative currently under way in the province. Beekeepers recognized the importance of producing a quality product in an environmentally sustainable manner. Supporting this environmental initiative is expected to further demonstrate to the consuming public the responsible production practices of the industry.

Some Options for Action

- 1) Initiate a “benchmarking” review to establish an industry profile and marketing study that will include current volumes of production in all beekeeping industry categories and appropriate consumer sales estimates for BC, and for national and international markets. The profile should provide detailed estimates of the economic benefits of beekeeping (primarily through pollination) to other agricultural sectors, notably tree fruit and berry crops. The profile should be developed in cooperation with the BCMAFF.
- 2) Develop and publish appropriate beekeeping production guidelines suitable for the industry. Because there is considerable range among beekeepers according to size of operation and production methods, it is expected these guidelines may be developed on three levels:
 - Mentor or apprentice level
 - Provincial level to merge with, and complement, Canadian export standards
 - Export level – to use Canadian or federal export product standards and coordination with the COFFS initiative.
- 3) Initiate, in cooperation with the BCMAFF, a full review of the role of inspection services in the beekeeping industry. This review should include the ongoing role of the BCMAFF in these services and a discussion of industry options to address the need for more complete enforcement of the requirements currently identified in the Bee Act.
- 4) Develop a quality “tracking” or “trace back” system for the industry. This system is expected to be an owner identification system. Labels, or tamper proof seals, will be prepared and all beekeeper products will be appropriately labelled prior to sale. The label or seal is expected to identify the product as produced in BC. This action will also be undertaken in step with the COFFS initiative and will utilize work done by other AFFF initiatives such as the Organic sector that has already developed a workable system.

6.3.3 Industry Communication

The BC beekeeping industry has addressed numerous issues and concerns and encouraged producer discussions to enhance industry development. It has been generally recognized that an acceptable level of cooperation and support among industry members within an industry, particularly on important issues such as product quality, is important for industry maturity and development.

The BCHPA, as the recognized industry association, has been addressing its own internal organization issues and working with the beekeeping industry in general, to develop appropriate communication strategies and approaches. Although the industry communication “tools” are in place, there is a need for improvements. The publication, BeeScene, for example, despite being an excellent trade publication, must be released in a more timely manner. The publication has been operating for 19 years and the impact of it has not been evaluated. The industry is concerned that it may not be providing maximum benefits to the industry. In addition there is a need to expand and develop the industry website. Developing the capacity to communicate with the industry (provincially and nationally) is an important area for future action.

An additional component of industry communication addresses ongoing review of industry development and the financial capacity to maintain this development over the longer term. This will involve a review of the advantages and disadvantages of introducing a levy system for the industry. This component has been identified as a cost-shared project within the **Industry Communication** strategic direction because it is expected to require numerous industry meetings and a full review of the advantages and disadvantages of a levy system. It is proposed results from this study of a levy system be presented to beekeepers who will then vote to approve or disapprove.

Currently, the BC beekeeping industry is governed by the Bee Act. It is expected that this Act will be repealed but the authority for the control of disease and the movement of bees will remain under the more general Animal Disease Control Act.

Some Options for Action

- 1) Develop industry communication more fully by improving the industry website. The website is expected to emerge as the main communication vehicle for the industry. Industry “chat rooms” particularly with emphasis on research and disease prevention, have been suggested. The industry newsletter will be put “on line” but hard copy mailings will continue.
- 2) Review the role of BeeScene as a communications vehicle for the industry.
- 3) Initiate a review of the advantages and disadvantages of a levy system for the industry. This will involve much industry discussion and communications and the preparation of options for review and vote by all beekeepers.

6.3.4 Training and Education

Despite the availability of some useful and valuable beekeeping resources, much available through the BCMAFF Apiculture section, appropriate training and education for beekeepers was considered to be important for industry development.

There is a need to address bee management issues and, because of the many opportunities in the industry, there was much discussion about a need to encourage industry entrants and provide new beekeepers with help and support to get started.

Beekeepers expressed the need for a system or process to allow for the transfer of current beekeeping information, and interpretation of that information, to the beekeepers in the province. Although the internet may provide much current information to beekeepers, there was concern expressed about how to interpret the information and the need to verify information from the internet was advanced.

A goal is to have workshops and seminars available for the industry that may be offered in different areas of the province on demand, and as required. The workshops may be developed in a generic way to start but will be designed for more specific topics and subject areas in the future.

Interested beekeepers may be trained as facilitators for these workshops.

Some Options for Action

- 1) Offer a series of provincial workshops that will combine education and training opportunities for beekeepers with promotion of the sector and its opportunities and promotion and awareness of the industry SP. The workshops will be organized and promoted to beekeepers in all areas of the province.
- 2) Introduce a system of shorter, practical training bulletins, internet-based, in cooperation with educational institutions and the BC Bee Breeder Association. This work will allow the industry to more fully address issues related to the recognition and treatment of common diseases.
- 3) Introduce a mentor program in order to encourage new entrants and to provide beekeeping expertise to younger people interested in beekeeping.

6.4 STRATEGY FOR IMPLEMENTATION OF THE PLAN

The preparation of a SP for the future of the beekeeping industry must address issues related to financial self-sufficiency and processes and procedures for ongoing industry development.

6.4.1 Funding

Two main factors will determine the success of this plan. One will be the enthusiasm, commitment, and energy of the beekeepers to create the appropriate climate for action and results. The other key factor is having funds available to obtain support as

required for cost-shared projects within the four key strategic direction areas. The establishment of a fundraising committee for the industry is recommended. The committee will review funding requirements and will recommend ways to obtain the necessary funds for cost-sharing according to the projects identified as priorities.

Some cost-shared project examples taken from the Options for Action within each strategic direction were included in the budget estimate below in order to provide guidance for plan implementation. It is recognized these projects are options only and other projects within the strategic direction areas may finally emerge. Unallocated amounts are also identified to recognize the need to encourage other proposals and “third party” projects.

COST-SHARED PROJECTS	Year 1			Year 2			Year 3		
	AFFF	In-Kind	Cash	AFFF	In-Kind	Cash	AFFF	In-Kind	Cash
Research	\$1000	\$500	\$500	\$20000	\$10000	\$10000	\$25000	\$12500	\$12500
Committee	\$1000	\$500	\$500	\$1000	\$500	\$500	\$1000	\$500	\$500
Maintain research				\$5000	\$2500	\$2500	\$5000	\$2500	\$2500
Unallocated				\$14000	\$7000	\$7000	\$19000	\$9500	\$9500
Marketing and Quality	\$4000	\$2000	\$2000	\$20000	\$10000	\$10000	\$20000	\$10000	\$10000
Marketing Study				\$10000	\$5000	\$5000			
Guidelines				\$5000	\$2500	\$2500	\$5000	\$2500	\$2500
Inspection	\$4000	\$2000	\$2000						
“traceback”				\$5000	\$2500	\$2500	\$10000	\$5000	\$5000
Unallocated							\$5,000	\$2,500	\$2,500
Industry Communication	\$20000	\$10000	\$10000	\$15000	\$7500	\$7500	\$15000	\$7500	\$7500
Website	\$5000	\$2,500	\$2500	\$5000	\$2500	\$2500	\$5000	\$2500	\$2500
Levy system	\$5000	\$2,500	\$2500	\$10000	\$5000	\$5000	\$10000	\$5000	\$5000
Unallocated	\$10000	\$5000	\$5000						
Training and Education	\$25000	\$12500	\$12500	\$20000	\$10000	\$10000	\$15000	\$7500	\$7500
Workshops	\$12000	\$6000	\$6000						
Training bulletin				\$1000	\$500	\$500	\$10000	\$5000	\$5000
Mentor Program				\$5000	\$2500	\$2500	\$5000	\$2500	\$2500
Unallocated	\$13000	\$6500	\$6500	\$14000	\$7000	\$7000			
TOTAL	\$50000	\$25000	\$25000	\$75000	\$37500	\$37500	\$75000	\$37500	\$37500

The industry proposes the expenditure of \$400,000 on selected cost-shared projects over a three-year period. The financial strategy is based on a 50:50 cost-sharing formula requiring a \$200,000 commitment from the AFFF. The SPC will provide direction for the management of the AFFF. Appropriate management support will be retained at an estimated management rate of 15% of the assigned fund. This estimate was based on a per diem plan for SPC members. The estimate also includes provision for SPC travel as required.

Funding options include the use of BCHPA membership fees to generate funds for the cash contribution needed for industry development projects. All beekeepers will be encouraged to support the BCHPA with their membership. Another option discussed

was a “project by project” appeal to the industry members for a contribution to get some early projects underway. Appeals to industry suppliers and established beekeeping businesses are also expected to be positive. The strategy for implementation of this SP also includes additional study of the benefits and value of an industry levy system. It is proposed the results from this study be presented to beekeepers who will then vote to approve or disapprove.

6.4.2 Partnerships

Working cooperatively with other industries was considered to be an important strategy for the implementation of this SP. The marketing efforts, for example, may be enhanced by the development of strategic partnerships with other agricultural sectors.

The SPC reviewed some specific areas for possible collaboration and partnership, particularly with other industries that may face similar challenges. The SPC would like to encourage sharing with others to reduce waste and duplication. Specific industries and initiatives considered for partnership were the Small Lot Agriculture Initiative (many beekeeper operations are consistent with the definitions established for “small lot agriculture”), Organic Sector Development (guidelines for the production of organic honey are now being developed) and the Food Quality and Safety Initiative. As mentioned in the Marketing and Quality Guidelines section (Page 15) of this report, both the Canadian On Farm Food Safety Initiative and the provincial Food Quality and Food Safety Initiative are identified as areas for collaboration and partnership.

These partnerships also extend to organizations that may benefit from the use of beekeeping products. Potential partners in the health field, for example, should be considered.

6.4.3 Plan Review

To ensure this SP is implemented, it is recommended a formal review process be put in place to review the SP and update it annually. The annual review should be part of an annual industry meeting and should involve some industry member feedback and discussion. The SPC recognized the important contributions to this SP that were made by industry members. However, the SPC also recognized that no plan can fully anticipate the future and ongoing review of the SP is necessary to keep the SP current and relevant to the industry.

It is recommended the Central Executive of the BCHPA assume responsibility for ensuring that SP reviews occur.

One gap identified in the SP, that the SPC did not explore in extensive detail, was how to manage the work to be done for beekeeping industry development. The SPC recommends that further details for managing the initiative be incorporated into a BC Beekeeping Industry Work plan that should be established, reviewed and submitted prior to each year that the SP is in place.

6.5 KEY PERFORMANCE INDICATORS

This SP was developed to address important industry weaknesses and to capitalize on opportunities available to the industry. The beekeeping industry in B.C. was considered to have potential for future growth.

How will the industry know when progress towards industry development is being made? The following are some suggested performance indicators to assist with the measurement of progress in the industry. These indicators will be further developed during annual plan reviews and during regular reporting on project results.

6.5.1 Selected Numbers and Ratios

Selecting appropriate benchmarking data for the industry was discussed. These data will be monitored by the industry to help assess and monitor industry development. Additional indicators may be developed. The following were the main indicators chosen:

- Total number of registered beekeepers in the province
- Percent of total number of registered beekeepers who are also members of the BCHPA
- Total registered hives, or colonies, in the province
- Percent of honey sales attributed to BC beekeepers
- Number of hives of BCHPA beekeepers as percentage of all registered hives
- Number of hives as a percentage of total hives in selected other provinces such as Alberta, Saskatchewan and Ontario
- Total new entrants to the industry as a percentage of total registered beekeepers
- Attendance at industry workshops as a percent of registered beekeepers
- Usage of the industry website as demonstrated by appropriate monthly statistics.

6.5.2 Selected Program Evaluations

How effective are the industry development activities being undertaken by the BC beekeepers? It was recognized during the development of this SP that some evaluation of industry development activities was necessary but, with limited budgets, all programs could not be evaluated. It is suggested the following programs be reviewed after implementation by an independent reviewer, one year after program completion:

- The operations, value and contributions of the Standing Committee on Research;
- The acceptance of the BC “quality trace back system”;
- The contributions to the industry of provincial workshops and seminars.

6.5.3 Selected Client and Industry Member Surveys

To develop the industry profile recommended as a benchmarking requirement for the industry, industry members will be surveyed to determine current operations. It is suggested this survey be conducted every second year to maintain appropriate industry information and to assist with monitoring progress.