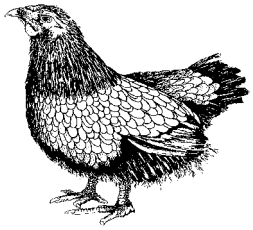
Sustainable Poultry Farming Group



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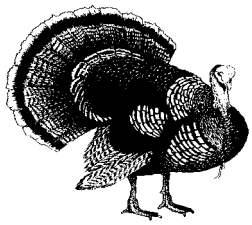

Newsletter

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Poultry Associations Lead Development Of Environmental Strategic Plan

On January 22, 2002, the SPFG held a workshop for directors of each of the four poultry associations called "Environmental Issues Arising from the Further Growth of the Fraser Valley Poultry Industry". The purpose of the workshop was:

- To create an awareness of recent poultry industry growth in the Fraser Valley, and its potential consequences.
- To develop a strategy to address the impacts of an increasing amount of manure from the Fraser Valley poultry industry.

...the SPFG was interested in creating a positive dialogue on the environmental effects of a rapidly growing poultry industry...

In the development of this workshop, the SPFG was interested in creating a positive dialogue on the environmental effects of a rapidly growing poultry industry in the Fraser Valley. As an environmental committee representing each poultry association, the SPFG is concerned that the industry can function within an environmentally sustainable framework, both now and in the future.

During this meeting, information was presented which identified poultry industry growth trends for a 20 year period. This period shows the increase of poultry production in the Fraser Valley for the period 1991-2000, and the potential growth trend for 2001 to 2010. The information for past trends is based on information gathered from marketing boards, while the future trendline is based on a conservative estimate from past growth patterns, potential bird production efficiencies, and market demand for

Current SPFG Program Partners

Agriculture Environment Partnership Initiative	B.C. Turkey Assn.
B.C. Chicken Growers' Assn.	Agriculture and Agri-Food Canada
F.V. Egg Producers' Assn.	B.C. Ministry of Agriculture,, Fisheries, and
B.C. Broiler Hatching Egg Producers' Assn.	Food

At A Glance . .. What's Inside

Director's Corner .....

Art Penner, B.C. Chicken Growers' Association Director Gives Views on Sustainability and the SPFG

Sustainability is a big part of what the SPFG is all about. Is the poultry industry really sustainable? Poultry production has doubled in the last ten years and the estimates are to almost double again in the next 10-12 years. This translates into huge manure production increases.

The SPFG has increased manure being moved from a couple thousand cu. yd. in 1995 to 60,000 cu. yd. today. This is an impressive accomplishment. But, it is not even keeping up with the increased production of manure. Our goal is to not only keep up with increased production but also to increase the SPFG's share of manure hauled.

To accomplish this we need to do a better job of marketing our manure. One idea is to possibly provide a manure spreading service to make our product easier to use.

The poultry industry needs to find uses for poultry manure that are not only new and innovative, but also above all sustainable.

--Art Penner

Welcome to Jim Elliott

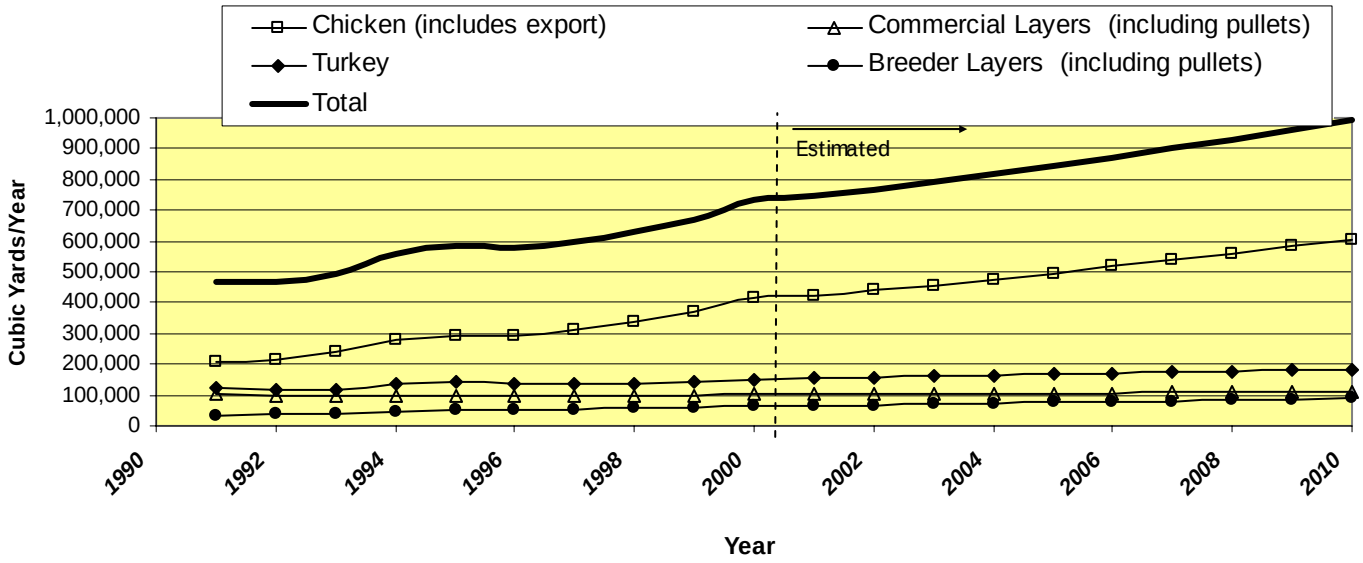
The SPFG is pleased to welcome Jim Elliott as the new SPFG Technical Assistant. Jim comes to us from a cattle and grain production background in Alberta. Jim operated his own farm for many years in south eastern Alberta, near Lethbridge. He has a lot of experience related to the needs of the position he will be assuming with the SPFG. Jim will be taking a lead role in maintaining and repairing of the SPFG conveyor fleet, as well as coordinating trucks from poultry to crop farms.

Environmental Strategic Plan Cont'd ...

poultry products. Figure 1 shows these past and future trends for each type of poultry produced.

From Figure 1, the broiler industry continues to have the greatest amount of growth in comparison with other poultry commodities. In the future, layer and turkey commodities are likely to remain in similar

Figure 1 Fraser Valley Manure Production vs Time



Environmental Strategic Plan Cont'd …

growth positions as in past years, while the least growth is predicted for commercial egg layers.

In the year 2010, the total amount of manure produced in the Fraser Valley will be about 1 million cubic yards for all poultry commodities represented by the SPFG. Present manure production (2000) is about 736,500 cubic yards. Over the next ten years (to 2010), manure production has the conservative potential to increase by 35 %, or 256,000 cubic yards.

Environmental Strategic Plan a part of Nutrient Management Action Plan

Close examination of the Fraser Valley nutrient balance situation has revealed areas where estimated nutrient budgets far exceed the capacity of the land or crop. Conclusions and Recommendations from the Nutrient Management Action Plan called for long term planning that would lead to implementation of a plan to avoid future nutrient imbalances in the Fraser Valley. The ESP will seek to identify the scope of nutrient imbalance in the Fraser Valley as influenced by many factors such as land use change, cropping patterns, and intensity of livestock and poultry production within a given area. Furthermore, it will seek to develop a plan to address the imbalance. The plan will focus on economically viable options that are effective and plausible. With an ESP, plans can be made to avoid future imbalances in nutrient application.

Cropping, Land Use, and Environmental Trends

SPFG has reported in the past on observed changes in cropping patterns and land use in the Fraser Valley which affects the local marketing of manure. Trends noted include:

⇒ **Changing land use patterns** – grass land converted to blueberry production (which uses virtually no manure in comparison with grass), reduced application of manure to raspberry land, and an increase in land base where either no fertilizer is used, or chemical fertilizer is used in preference to manure.

⇒ **Food safety regulations** – new requirements which involve the auditing of crop farms for potential food safety concerns are being brought about by Safeway through a multinational auditing company – SGS Laboratories. Two of these concerns which affect poultry producers needing to market manure are that manure can not be applied to a crop less than 120 days before harvest and that manure should not be stored uncovered on the crop producers property.

⇒ **Increased enforcement of manure storage regulations** – this will likely affect manure demand in both local and Delta manure markets.

⇒ **Increased chicken production in the Fraser Valley** – transfer of quota to the FV from other regions, increase in export chicken production, etc. A substantial number of chicken production facilities have been built in the last 2 years.

Benefits in developing an Environmental Strategic Plan (ESP)

⇒ *Long term economic viability* – A well considered ESP for the Fraser Valley provides an opportunity for creating a competitive advantage for our producers by improving environmental sustainability.

⇒ *Public/Consumer perception* – Today's modern and often intensive agriculture industry can raise concerns within communities. Whether real or perceived, these concerns are being taken seriously by government and the public. An ESP can help the poultry industry strengthen it's relationship with the public.

⇒ *Stronger relationships* - Developing an ESP provides an opportunity to redefine the relationships between poultry producers, marketing boards, industry service providers, government agencies and the public.

⇒ *Window of opportunity* -environmental challenges are best dealt with when there is an opportunity to pro-actively construct an ESP which builds on the cooperative relationships and linkages possible within the poultry industry.

⇒ *Protection of resources* – poultry producers now and in the future need to see that their investment is secure within the context of manure and waste management. An ESP should help poultry producers with manure management options so that they can plan how their farm and their industry can prosper in the future.

Environmental Strategic Plan Cont'd ...

Fraser Valley Land Use – changes and effects

As part of the information presented at the workshop, land use trends for a section of Langley Township were examined. In particular, changes in agricultural land use for the period 1996 to 2001 were examined. Like other parts of the Fraser Valley, land use in Langley is in a state of flux due to changes that are beyond the control of poultry producers. These changes are likely of a similar pattern and magnitude across the Fraser Valley. Some interesting observations were noted from this exercise.

In Langley during this period, the largest change in property use (74 properties in total) was the conversion of grassland (pasture, forage, or neglected grassland) to land use which either does not require or does not use substantial amounts of manure in their production practice (nearly 75 % of conversion). Grass production is the single largest potential user of fertilizer nutrients from manure. A grass crop for instance, can utilize ten times the amount of nitrogen compared to a raspberry crop, so loss of this land use will greatly affect manure demand. The following is a brief synopsis of these land use changes from former grassland:

⇒ 35 % of properties, or 33 % of acreage went into nursery production
⇒ 20 % of properties, or 20 % of acreage went into greenhouse crop production
⇒ 11 % of properties, or 21 % of acreage went into berries (likely mainly blueberries) production
⇒ 10 % of properties, or 13 % of acreage was turned into cultivated land with crop type unknown.

In addition to the above noted changes, land use also was affected in the following ways:

⇒ A total of 24 % of properties, or 13 % of the acreage went to other uses such as cranberries, poultry barns, vegetables and flowers, etc.
⇒ 7 % of properties were converted from forest to agriculture.

Effects of Land Use Change

The greatest effect on poultry producers from this land use change will likely be local waste management options. Poultry producers who traditionally rely on local markets for manure will see a drop in demand as land use changes from grass to crops such as berries, nursery, field vegetables, and flowers which use little or no manure As well, of even greater impact will be the conversion of any land to cranberry, blueberry, greenhouse, and poultry barn uses which either use no manure, or in fact produce more manure. Of the land remaining which could potentially use manure as a fertility source, crop safety regulations as previously mentioned may have a significant influence on the form of manure which is applied. In other words, poultry manure may have to be composted, or have some other form of treatment to eliminate food-borne illness concerns.

Groundwater Protection Program – can it alleviate increased environmental concerns in the Fraser Valley?

The volume of manure hauled to distant markets by the SPFG has been on an increasing steadily since the inception of the Groundwater Protection Program (GPP) in the fall of 1995. Figure 2 illustrates the increases seen over the past 7 years. In addition, a trendline is displayed in which the amount of manure hauled through the GPP is estimated based on previous years hauling patterns. From Figure 2, in the year 2010 a total of over 120,000 cubic yards of manure is projected to be hauled.

Market growth with crop production industries in the future will likely occur in the BC interior. In the B.C. interior, grass and grass-legume mixes are the crops which will likely use the largest volume of manure. Delta is not viewed as a market with room for significant expansion. To accomplish a constant expansion of interior manure markets will require much time and marketing effort by the SPFG. Marketing efforts will probably need to be similar to those provided by fertilizer companies for their customers and may require providing custom manure spreading and crop advisory services.

Environmental Strategic Plan Cont'd ...

In addition, the SPFG will have to start implementing the use of trucks hauling one-way loads (manure only) as there will likely be no back haul available. To date, backhauls have covered the cost of returning a truck to the Fraser Valley. Obviously, the option of having a payload in a truck for both destinations significantly reduces the cost of manure transport. To date, crop producers purchasing manure have fully paid for the cost (utilizing a backhaul) of transporting the product to their farm or ranch. It is unlikely that interior crop producers will pay the extra amount to transport manure to their fields if that cost is as high as required under a one-way hauling scenario. Therefore, funds to cover this cost will have to come from other sources in the future as the numbers of loads going into the interior far exceed those coming into the Fraser Valley.

Figure 2 Manure Hauled to Distant Markets by SPFG
- Present Amount and Future Prediction -

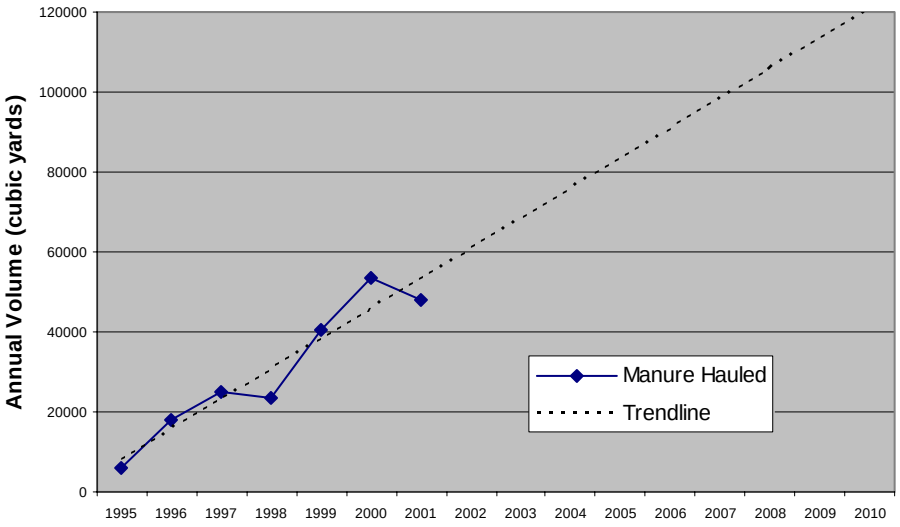
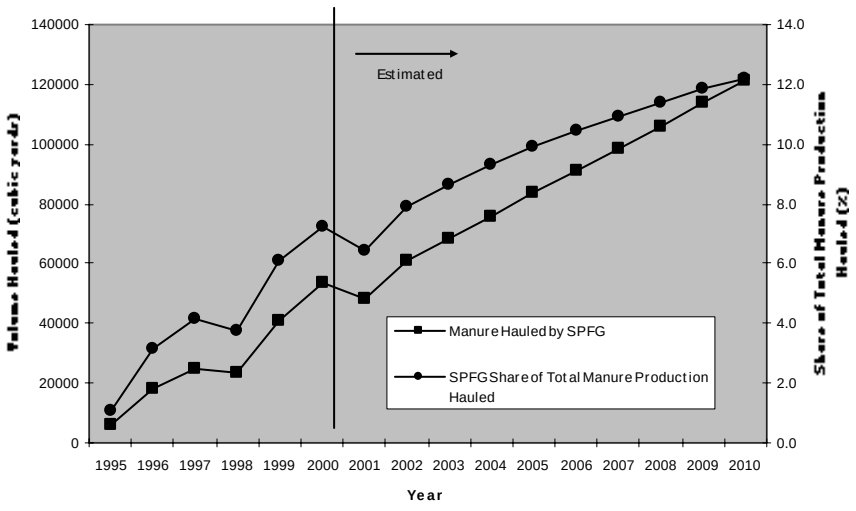


Figure 3 again shows the amount of manure hauled to date by the SPFG and projections for the future. In addition, it identifies that amount as a proportion of the total amount of manure produced each year. From Figure 3, the SPFG projects it will handle an increasing share of Fraser Valley manure production. However, while this share may be annually increasing, there is an actual decline over time relative to the increase in manure production. In the Year 2010, about 995,000 cubic yards of manure will be produced in the Fraser Valley. Table 1 (see page 6) suggests a possible scenario in the year 2010 in which a total of 188,500 cubic yards of manure will have to be marketed outside the structures now present. This may be considered conservative since the

Figure 3 Manure Hauled Annually and Share of Total Manure Production Hauled by SPFG
- 1995 to 2010 -



Environmental Strategic Plan Cont'd ...

effect of land use change on local markets has not been considered.

Table 1

Conclusions/Recommendations of the January 22, 2002 Workshop

From this workshop, a committee was established (Poultry Environmental Steering Committee—P.E.S.C.) to deal with the further growth of the FV poultry industry from the perspective of dealing with manure and mortality issues. Furthermore, a **two phase approach was recommended** to carry out actions that will resolve environmental issues likely to occur due to the further growth of the F.V. poultry industry.

Phase 1 was deemed to involve short-term environmental recognition and enhancement in the following areas:

⇒ PESC committed to raise awareness regarding this strategy to association directors and members
⇒ PESC recognized the fact that the SPFG is doing well and operating within its' mandate
⇒ SPFG continue to develop markets to the B.C. interior and explore the feasibility of hiring a salesperson to market poultry manure into the interior
⇒ SPFG should expand its educational role including promotion of the SPFG program
⇒ PESC through SPFG report to AEPI on progress of FV poultry industry waste management strategy.

Phase 2 will involve the development of an industry-backed strategic environmental plan. The newly-formed (from this workshop) Poultry Environmental Steering Committee will be responsible for overseeing the development of this strategy to ensure that needs of poultry producers are met and that financial support from the poultry industry is available for development of the strategic plan. The SPFG will continue to be involved with the development of an environmental strategy seeking to meet the needs of Fraser Valley poultry producers and the environment. For further information on any of the materials presented at the workshop, please call Kevin (604-556-7781) at the SPFG office and such materials will be made available.

GPP Conveyor Use and Hauling Rates - Two Options for Fraser Valley Poultry Producers

The GPP continues to offer poultry manure hauling services to 'distant markets' for 'dry' manure, and as the occasion presents, 'wet solid' manure. Two factors allow the SPFG to deliver to distant markets: use of large volume trucks and the ability to load these trucks through the use of producer owned conveyors. To make this service convenient, the GPP offers the following conveyor usage fee options:

☛ **Option #1 Full Rate** is designed for producers who use full SPFG manure marketing and hauling services. Payment of fee in this scenario is on a straight user fee basis (**$1.25 per cubic yard + conveyor delivery fee**). **A discount of $0.50 per cubic yard** is now possible for producers with a roofed manure storage facility. This discount is available to provide an incentive to producers with a covered manure storage facility large enough to store manure over a substantial period. The discount may be available during the winter or summer rate period at the discretion of the SPFG depending on market demand. However, since it is not likely that there will be a significant demand for manure during the late fall and winter period, manure will likely be scheduled for pick up during the Summer Rate period.

☛ **Option #2** is conveyor rental only. The charge for conveyor rental is $0.90 per cubic yard conveyed + conveyor delivery fee. The poultry producer is responsible for all arrangements involving manure transportation and marketing.