

*Prince Edward Island Department of Agriculture, Fisheries and Aquaculture  
Charlottetown, Prince Edward Island, 2005*

*To the Honourable Leonce Bernard  
Lieutenant Governor of Prince Edward Island*

*Sir:*

*I have the honour to submit herewith the 2004/05 Annual Report of the Department of  
Agriculture, Fisheries and Aquaculture.*

*I have the Honour to be, Sir,  
Your obedient servant,*

*Kevin J. MacAdam, Minister  
Agriculture, Fisheries and Aquaculture*

To the Honourable Kevin J. MacAdam  
Minister of Agriculture, Fisheries and Aquaculture

Sir:

I am pleased to submit this report of activities of the Department of Agriculture, Fisheries and Aquaculture for the fiscal year ending March 31, 2005, along with the year-end budget summary.

The public sector continues to change and adapt in response to new challenges and opportunities. During the past year, the provincial government embarked on a major program renewal process. This was also accompanied by a workforce renewal process. The common aim of both of these initiatives is to restructure and refocus on ways the public sector manages its human and financial resources to improve its delivery of programs and services in the context of existing and emerging priorities. With limited resources, finding new and better ways to achieve our goals is an ongoing process.

One result has been a reorganization of some government departments. The Forestry and Resource Modeling Division of the department was transferred to the new Department of Environment, Energy and Forestry. At the same time, the new Department of Agriculture, Fisheries and Aquaculture undertook significant changes in its organizational structure. A number of staff are being reassigned new responsibilities in order to better serve the needs of the agriculture, fisheries and aquaculture industries.

The financial pressures being experienced by many within the agriculture industry have resulted in new levels of demand on farm safety net programs. The department administers the Canadian Agricultural Income Stabilization program, and additional staff were reassigned over the past year to expedite the processing of a record number of applications.

The goals of the department continue to be focused on working with the industries we serve to help ensure their continued sustainable growth and development. Sustainable development rests on the three pillars of environmentally responsible, socially acceptable and economically viable production and marketing practices. The department continues to pursue the means to add value to our products, create increased diversification and achieve greater stability and profitability.

The department is supportive of the work of the Farm Income Improvement Committee which has the mandate to recommend solutions to improve and stabilize farm incomes.

In an effort to achieve a more fair and equitable allocation of fisheries resources, the Government of Prince Edward Island has filed a statement of claim in the Prince Edward Island Supreme against the Government of Canada and the Minister of Fisheries and Oceans. The statement of claim challenges the constitutional authority of the federal minister in matters of licensing and management.

The department remains committed to working closely with the primary and related industries to increase their contribution to the economy and to rural communities.

Respectfully submitted,

Wayne Hooper  
Deputy Minister

## The Year in Review

Continued downward pressure on commodity prices was a persistent theme during 2004. This was further exacerbated by a North American-wide surplus of potatoes and the ongoing effects of the BSE crisis that affected livestock producers. As a result, farm cash receipts dropped to \$348 million and net farm incomes decline to their lowest level in recent year, with a negative return of approximately \$19 million.

To help offset the low returns to producers, support payments under the Canadian Agricultural Income Stabilization program were in the area of \$20 million.

The department and the industry continue to work together to implement measures which will help contribute to the stabilization of the industry and ensure its sustainable growth and development. In April, a symposium on the future of agriculture was organized by the department in cooperation with the industry. The symposium brought together representatives from all commodity organizations to discuss markets, marketing and product differentiation. As a followup to the symposium, a Farm Income Improvement Committee, with representatives from the major farm groups and commodity organizations, was established to develop recommendations for government and industry on solutions to improve and stabilize farm incomes.

The department provides financial support to FoodTrust of Prince Edward Island, an industry-led organization with the mandate to market high quality, branded products from sustainably managed resources. FoodTrust has experienced a strong growth in sales from its premium potato brand, Fresh Obsessions.

The provincial government contributed more than \$5 million to the establishment of a new beef plant in Borden-Carleton. The plant is a partnership between Maritime beef producers and the retailer, Co-op Atlantic. The plant will be producing the award-winning Atlantic Tender Beef Classic brand. The plant will help contribute to the growth and stability of the beef industry in the region.

Government and industry continue to invest in on-farm conservation practices. Government contributions during the year were close to \$1 million. The department actively supports the Environmental Farm Plan process which helps producers identify potential environmental problems in their operations and develop action plans to address them.

The Future Farmer program, which was established in 2003, saw a total of more than 140 participants. The program provides training, support for business planning, an interest rate rebate and other supports.

There have been ongoing discussions about the use of genetically-modified crops in the province. As a result, the legislative Assembly's Standing Committee on Agriculture, Forestry and the Environment was asked to conduct public consultations on whether the province should be declared a GMO-free zone. The committee heard from a great number of presentations which were clearly divided on the issue.

The fisheries and aquaculture industry experienced steady returns in 2004. Lobster landing were relatively stable, with the landed value once again exceeding \$100 million. The aquaculture

industry continues to expand, with a total value reaching more than \$33 million.

In February of 2005, the Prince Edward Island government filed a statement of claim in the Supreme Court of Prince Edward Island against the Government of Canada and the federal minister of Fisheries and Oceans. The statement of claim challenged the constitutional power of the federal minister to make licensing and other management decisions. The provincial government is seeking a more fair and equitable allocation of a number of fisheries species in the region.

## Department of Agriculture, Fisheries and Aquaculture

### 2004-2005 Expenditures and Revenue

Division	Original Budget	Revised Budget	Actual Expenditure/Revenue
<b>EXPENDITURE BUDGET</b>			
Corporate & Financial Services	\$12,983,200	\$13,601,900	\$16,292,965
Strategic Planning & Measurement	\$424,000	\$403,200	\$405,386
Agriculture Resource Division	\$13,119,900	\$12,223,900	\$12,245,092
Agriculture Policy & Regulatory Division	\$3,980,300	\$4,848,600	\$4,842,431
Fisheries & Aquaculture	\$2,401,400	\$2,350,800	\$2,429,657
<b>Total</b>	<b>\$32,908,800</b>	<b>\$33,428,400</b>	<b>\$36,215,531</b>
<b>REVENUE BUDGET</b>			
Corporate & Financial Services	\$2,233,400	\$2,233,400	\$2,681,739
Strategic Planning & Measurement	\$0	\$0	\$54,618
Agriculture Resource Division	\$414,500	\$414,500	\$383,914
Agriculture Policy & Regulatory Division	\$167,400	\$167,400	\$145,251
Fisheries & Aquaculture	\$35,000	\$35,000	\$40,818
<b>Total</b>	<b>\$2,850,300</b>	<b>\$2,850,300</b>	<b>\$3,306,340</b>
<b>TOTAL NET</b>	<b>\$30,058,500</b>	<b>\$30,578,100</b>	<b>\$32,909,191</b>

Based on Financial Reports of November 1/05

During the 2004/05 fiscal year the Department's Expenditure Budget was increased by \$519,600 which included an increase of \$387,500 to fully fund the provincial share of the farm safety net programs. The balance of \$132,100 was the additional salary requirement resulting from the negotiated Collective Agreement between the Government of PEI and the Union of Public Sector Employees. The variance of \$2.3M between the Department's net budget and actual is the result of a change in the accounting method used to accrue the provincial share of expenditures for the agriculture safety net programs.

## **Corporate and Financial Services Division**

The Corporate and Financial Services Division provides financial, human resource, information technology (IT), and administrative services to departmental personnel in the areas of:

- financial management
- corporate IT management
- personnel administration
- human resource development
- administrative support services

Agriculture business risk management programs are also administered by the Farm Income Risk Management section of the division.

## **Human Resources, Finance and Administration**

The department identified human resource planning priorities through the Program Renewal initiative. The objectives of this government-wide program were to reduce spending, renew programs and realign human resources with the department's program delivery requirements. Management participated in a planning process to ensure the alignment of human resources with the department's program priorities. The program also offered incentives to employees to leave government voluntarily through early retirement or voluntary severance. Eighteen employees of the department took advantage of this opportunity.

The department remains committed to continuous learning through the Human Resource Development Policy and the Central Training and Development Fund. Employees were supported in a number of areas including course subsidization, occupational health and safety training, leadership development and wellness initiatives.

The importance of a safe and healthy work environment is recognized by the department. A comprehensive Occupational Health and Safety Program was developed by the department including the creation of safe work procedures. This work will be an ongoing effort.

The position establishment was reduced by 65 employees (32 full-time and 33 part-time) with the transfer of the Forestry and Land Modelling Division to the Department of Environment, Energy and Forestry in December, 2004.

## **POSITION ESTABLISHMENT (as of March 31, 2005)**

	Full Time	Part Time	Total
Minister's Office	5	0	5
Corporate & Financial Services	23	8	31
Strategic Planning and Measurement	6	0	6
Agriculture Resource	60	5	65
Agriculture Policy & Regulatory	18	7	25
Fisheries and Aquaculture	15	5	20
Total	127	25	152

In addition to the above established permanent positions, the department employed 32 students and 112 casual employees. These numbers include those employed during the 2004 season by the Forestry and Land Resource Modelling Division which was subsequently transferred to the Department of Environment, Energy and Forestry.

The Finance and Administration unit continued to serve the department's needs by providing advice, assistance and departmental co-ordination in the areas of budgeting; financial forecasting; accounts payable; accounts receivable; claiming activities under federal-provincial agreements; risk management; vehicle fleet management; telecommunications system administration; contract management and reporting requirements; accommodation requirements; records management activities; as well as the provision of reception and courier services. On-going support was also provided to departmental users of the ORACLE Financial Information System.

### **Information Technology Section**

The mandate of the Information Technology Section is to assist the various divisions of the Department of Agriculture, Fisheries and Aquaculture and the Division of Forests, Fish and Wildlife of the Department of Environment, Energy and Forestry in sound information management and the effective and cost efficient delivery of program and services to clients through the use of the latest technologies.

The IT web staff continue to provide web programming and content services to departmental staff through the internal, Eureka, website as well as to clients of the department through the external government website. The ability to customize each staff person's available tools on Eureka has proven to be very popular and new tools are being added in order to address general staff needs. Following the successful redesign and reorganization of the external web presence, necessary for ease of data access for clients, the focus continued with maintenance and update of the content and existing web applications.

As predicted, this past year saw a large programming effort for applications aimed at delivering farm insurance programs, a commitment entered into through the national Agricultural Policy Framework (APF). A number of new programs were developed in this area, existing programs were modified and much more attention was applied to the Canadian Agricultural Income

Stabilization program. Most other application development efforts in other divisions were of a maintenance or upgrade nature.

Due to the loss of experienced programming staff over the past couple of years, it became a priority to cross train web development staff to perform some of the functions of regular application development staff. With the further reduction of human resources in both areas, the challenge for the new year will be to utilize remaining resources in the most effective way possible.

The maintenance of the department's database infrastructure was performed with very little incident this year. This is an area that often receives very little attention when everything works well but is absolutely vital to the department when considering the incredible volume and value associated to the historical data required to allow many programs to function. As with other years, ensuring that current and historical data is properly stored, accessed, secured and backed up is a critical component of the services provided.

The primary Novell server provided services to employees at the fifth floor Jones building, the Research Station and Upton Road Forestry through our local area network (LAN) while a separate server managed the Soil and Feed Lab. Replacement and upgrading of departmental computer systems through the corporate lease program continued. Network services and connectivity are provided to approximately 200 workstations with the assistance of the government wide area network (WAN). Mini LANs in each office and high speed internet allowed staff in the Dairy Lab; Potato Services; Farm Centre; Plant Health Lab and the Beach Grove, Wellington and Southampton Forestry offices convenient access to network services within the department and the rest of government.

## **Farm Income Risk Management**

The Farm Income Risk Management Section supports Prince Edward Island agriculture through the delivery of agricultural safety net programs. Two main safety net programs are funded through this section - Production Insurance (PI) and the Canadian Agricultural Income Support (CAIS) program. In the fall of 2003, when the province signed the Agricultural Policy Framework (APF) with the federal government, an agreement was made for the province to deliver the CAIS program. This committed the Farm Income Risk Management section to delivery of the 2003 to 2007 support years under CAIS. The first part of 2004 was devoted to promoting both PI and CAIS and the development of a data processing and delivery program for CAIS. By the application deadlines there were 203,000 acres insured under the PI program (up 95 percent from 2003) and 906 farms enrolled in the CAIS program (up 150 percent from those enrolled in CFIP).

The package of programs, which was offered in 2004 to assist in reducing the impact of income reductions for individual farmers, consisted of:

- Basic Net Income Stabilization Account (NISA) - terminated in 2003 with criteria set up to phase it out by 2009. (Approximately \$24 million has been removed from NISA accounts over the past 12 months)
- Canadian Farm Income Program (CFIP) - ended with the 2002 support year. Some late claims were paid early in 2004 and several appeals were heard. \$1.9 million was paid in 2004.
- Production Insurance (formerly Crop Insurance) saw a 27 percent increase in acres insured

- plus 71,000 acres of forage crops insured for the first time.
- Crop Insurance Bacterial Ring Rot Protection Plan
- Canadian Agricultural Income Stabilization (CAIS) program - support payments began to be processed in May with \$18 million paid out for the 2003 support year and \$1.8 million paid for 2004 support by year end.

The province also provided funding for two additional programs:

- Environmental Farm Plan Initiative in Crop Insurance
- Elite Seed Potato Quality Improvement Program

### **Results achieved in 2004/05**

There is a continued need for effective agricultural safety net programs. Livestock commodity prices continued to fluctuate dramatically since the discovery of BSE in May of 2003. Grain margins remained low while potato inventories were high thus forcing prices down with market demand remaining poor.

The trend for increasing participation in crop insurance continued with insured acres up 27 percent to 132,000 acres. A new forage program was introduced in 2004 with 71,000 acres covered in the first year. The 2004 planting season was on time and there were good growing conditions over the summer and fall. There was once again a better than average yield of good quality potatoes, however, low market demand saw large potato inventories on hand in the spring of 2005. Persistent low demand caused some of this inventory to be destroyed. The insured value of PI crops reached \$92 million and with 90 percent coverage on potatoes and drought losses in forages, indemnity payments reached \$7 million. This was the second highest year for total indemnity payments but was an average year with a loss ratio of 0.86. The high PI participation and thus high premium income allowed the Corporation to again strengthen reserves.

The 2001 through 2004 years clearly show the uncertainty, risk level and volatility in the agricultural industry and a desire by producers to offset some of their risk with government sponsored insurance programs.

The Spring Cash Advance program offered by Agriculture and Agri-Food Canada continued. The CAIS program saw 906 producers enrolled for the 2003 support year. By year end \$18 million in support had been sent to 508 farms. Low potato prices and the border closures from BSE triggered most of the losses.

<b>PRODUCTION INSURANCE PROGRAM</b>						
<b>Yield Guarantee</b>						
<b>Crop Year</b>	<b>Farms (#)</b>	<b>Contracts (#)</b>	<b>Acres (#)</b>	<b>Coverage (\$)</b>	<b>Premiums (\$)</b>	<b>Indemnities (\$)</b>
2004*	4.5e+32	1.25e+34	1.3e+56	8.4240e+87	7.540e+76	4,449,443
2003						1,788,735
2002						925,680
2001						10,640,171
2000						2,669,051
1999						2,519,035
1998						1,706,544
1997						822,607
1996						1,946,898
1995						1,482,610
1994						1,990,495

\* Not all claims were settled by the end of the year.

Note: PI premium cost share in 2004 was 39% federal, 27% provincial, 34% producer

<b>BACTERIAL RING ROT PROTECTION</b>					
<b>Crop Year</b>	<b>Farms (#)</b>	<b>Potato Acres Insured (#)</b>	<b>Insured Value (\$)</b>	<b>Premiums (\$)</b>	<b>Indemnities (\$)</b>
2.00420e+39	1.12e+18	5,682	806,725	4.03365e+49	5.20000e+21
		6,369	986,266		
		4,481	682,242		
		3,433	461,358		
		2,759	389,973		
		3,578	505,286		
		5,249	677,508		
		3,659	614,950		
		8,121	1,014,563		
		11,214	1,424,432		

Note: Prince Edward Island Department of Agriculture, Fisheries and Aquaculture contributed 33 percent of the Bacterial Ring Rot Protection Premiums

<b>PRODUCTION INSURANCE PROGRAM Weather Based Forage Program</b>						
<b>Crop Year</b>	<b>Farms (#)</b>	<b>Contracts (#)</b>	<b>Acres (#)</b>	<b>Coverage (\$)</b>	<b>Premiums (\$)</b>	<b>Indemnities (\$)</b>
2004	327	649	70,991	8,714,008	522,841	2513841

*Note: This was a new program offered for the first time in 2004.*

<b>AIDA/CFIP/CAIS Income Disaster Assistance</b>			
<b>CLAIM YEAR</b>	<b>Qualifying Applicants (#)</b>	<b>Average Payment per Applicant (\$)</b>	<b>Total Payments (\$)</b>
CAIS - 2003 claim year CFIP - 2002 claim year CFIP - 2001 claim year CFIP - 2000 claim year AIDA - 1999 claim year AIDA - 1998 claim year	9.7220520924e+17	3.5533453344e+29	1.8051215929e+42

*Note: Payments are cost shared 60 percent by Canada and 40 percent by Prince Edward Island.*

<b>NET INCOME STABILIZATION ACCOUNT</b>				
<b>Year</b>	<b>Participants (#)</b>	<b>Provincial Contribution (\$)</b>	<b>Withdrawals by producers (\$)</b>	<b>Account Balances (\$)</b>
2004/05	2.41820e+29	5,799	24,000,000	14,793,694
2003/04		1,673,699	20,878,784	37,822,568
2002/03		1,589,901	9,989,970	50,128,568
2001/02		1,605,152	12,589,008	44,999,235
2000/01		2,686,024	10,885,480	47,634,097
1999/00		2,671,162	7,618,444	41,257,786
1998/99		2,331,105	8,795,028	33,846,019
1997/98		2,042,700	4,149,699	28,029,100
1996/97		1,873,700	1,476,727	19,523,000
1995/96		790,000	510,765	9,658,000

*Notes:*

*Provincial contribution is 2% of Eligible Net Sales plus provincial share of the interest bonus.*

*Canada contributes two times the amount the province contributes to NISA annually.*

*Program terminated in 2003. Producers to close accounts by March, 2009.*

<b>ELITE SEED POTATO QUALITY IMPROVEMENT PROGRAM (ESPQIP)</b>				
<b>Program</b>	<b>Applicants (#)</b>	<b>Acres (#)</b>	<b>Average Payment (\$)</b>	<b>Total Amount (\$)</b>
2004 ESPQIP - PI assistance <sup>1</sup>	14	1239	3112	43563
2003 ESPQIP - CIP assistance <sup>2</sup>	26	1857	1314	34160
2002 ESPQIP - CIP assistance <sup>3</sup>	25	3024	2681	67034
2001 ESPQIP - CIP assistance <sup>4</sup> ESPQIP - /acre pmt	6840	66521438	501721750	341,155 862,977
2000 Virus Reduction - CIP assistance Seed Incentive/acre	10839	62691433	365922056	395,164 860,181

*Notes:*

<sup>1</sup> PI assistance was 9% of total premiums which reduced the producer cost for the Elite Seed Plan from 34% to 25%.

<sup>2</sup> CIP assistance was 8% of total premiums which reduced the producer cost for the Elite Seed Plan from 33% to 25%.

<sup>3</sup> CIP assistance was 8.33% of total premiums which reduced the producer costs for the Elite Seed Plan from 33.33% to 25%.

<sup>4</sup> CIP assistance is additional subsidy up to \$75/acre for crop insurance premiums.

The per acre incentive was \$600/acre for specified varieties and seed classes that were dead by August 12.

<b>Environmental Farm Plan Discount</b>			
<b>Year</b>	<b>Applicants (#)</b>	<b>Average Payment (\$)</b>	<b>Total Amount (\$)</b>
2004	385	528425	203432134039
2003	315		

*Note: The province introduced an Environmental Farm Plan (EFP) discount in 2003 for those producers in crop insurance who completed an EFP training course. The discount was 3% of total premiums or a 10% discount to producers premiums. This initiative supported the province's emphasis on environmental farm planning and helped to promote the EFP program within the farming community. Support continued in 2004.*

# **Agriculture Policy and Regulatory Division**

The Agriculture Policy and Regulatory Division wide ranging mandate includes federal- provincial agricultural policy and trade issues, administration of industry development programs, on-farm food safety, plant health, Marketing Council, supply and non-supply managed commodity liaison, domestic and foreign trade, research and legislation.

Fulfilling the mandate of the division requires working in partnership with general agriculture and agri-food organizations, provincial commodity organizations and educational institutions in the development and implementation of industry led strategies that address short and long term critical issues and create wealth for the agri-food sector in a sustainable fashion. As part of working with and for industry, Marketing Council is responsible for the general supervision of all commodity boards, marketing commissions and commodity groups established under this Act. It reports annually to the the Legislature.

Regulatory enforcement and legislative development are also responsibilities of the division. The Regulatory Services and Plant Health Section enforces various pieces of legislation to help ensure quality and protect Prince Edward Island agriculture from a variety of quarantinable pest that could negatively impact potato production. This is supported by the development of legislation for issues that are within the scope of the Department of Agriculture, Fisheries and Aquaculture.

As part of the division's policy function, staff deal with federal and provincial policy issues that affect Prince Edward Island's agricultural industry. This section represents the department on numerous federal/provincial/territorial committees that determine the direction of emerging issues such as traceability, disease emergency preparedness and food control systems.

The following examples help illustrate the scope of Policy and Regulatory Division's mandate.

## **Agricultural Policy Framework**

The division worked closely with its provincial counterparts, and the federal government in developing and delivering programs using Canada's Agricultural Policy Framework. The APF's goal is helping secure the long term prosperity and success of Canada's agricultural and agri-food sector by being the world leader in food safety, innovation, and environmentally responsible production.

## **Food Safety and Animal Health Systems**

Several provincial commodities continue to implement the national on-farm food safety programs. The potato industry is utilizing the Canadian Horticultural Council's potato food safety program in order to meet the demands of the marketplace. In support of these programs, ensuring the availability of locally trained auditors for those farms that seek validation continues to be a focus. The beef industry piloted the National On-farm Food Safety Program and implementation is expected to continue in 2005-2006.

The division, on behalf of the department, continues to work in co-operation with the Canadian Food Inspection Agency and industry to prepare for the outbreak of a foreign animal disease. In the past year, there has been activity in numerous provincial and national committees on carcass disposal, traceability, zoning and emergency preparedness. Co-ordinating the geo-referencing of all the major

livestock and poultry operations on the Island continues. The division is also working with the poultry industry in developing a response manual in the event of an outbreak of a foreign animal disease.

## **Harness Racing**

In August of 2004, the Province of Prince Edward Island announced a major initiative for harness racing in the province. Two multi-purpose entertainment complexes will be constructed in support of the harness racing industry. Construction started in October on the Charlottetown facility, which will be completed in August, 2005.

This initiative will help position the harness racing sector for a period of growth. The total purses paid out in the province is expected to double for overnight horses, and several increases in the provincial stakes program will be implemented.

Included in the facility will be a new grandstand seating, tiered dining, several harness racing themed areas which will recognize the significant achievements of the people and horses developed in the province, and a complete rebuilding of the racetrack surface.

## **Regulatory Services Program**

The Regulatory Services Section administers and enforces legislation and regulations relating to agriculture and animals. Section activities include inspections under the Dairy Industry Act, Companion Animal Protection Act, and the Bee Health Regulations and responding to complaints under the Animal Health and Protection Act and the Fences and Detention of Livestock Act. Staff are also responsible for the legislative initiatives of the department. Some examples are amending of the *Fisheries Organizations Support Act*, repealing the *Poultry and Poultry Products Act*, and amending the *Stray Livestock Act*.

The division responds to requests made to the department under the *Freedom of Information and Protection of Privacy Act* and administration of the farm registration legislation.

## **Plant Health**

The *Plant Health Act* with its potato regulations involves such issues as planting audits, transport vehicle disinfection and post-harvest virus testing. Division staff are involved with disinfection service calls, inspection and audit activities in support of cull potato disposal and planting standards, sample collections of post harvest virus testing, and permits for the planting of potatoes originating outside the province.

## **Agriculture Resource Division**

The Agriculture Resource Division provides programs and services to the agriculture industry in the areas of farm extension services, laboratories and sustainable resources management.

### **Farm Extension Services Section**

The focus of the Farm Extension Services (FES) section is on-farm agricultural extension, agricultural information management, and industry development. The section promotes a strong interaction among the three staff units to provide a unified service to producers.

### **Agriculture Information Officers**

The three officers provided clients with a first point-of-contact for information on commercial and general agriculture inquires. Almost 3000 telephone requests were addressed at the Agriculture Information Center. Staff were responsible for responding to e-mail requests that were received through the government website. As farmers and the public continue to increase their use of the web as an information source, staff continued to improve and build upon the content of the department website, [www.peifarm.ca](http://www.peifarm.ca). The usage of the website doubled from the previous year.

The unit was responsible for an e-letter service to farmers and agribusiness. Every two weeks an e-mail was compiled that included links to articles of information, news and/or reports that are available on the Internet. The links included, but were not limited to, local, regional, national and international industry news, markets, research and development, innovation, farmer profiles, industry statistics, production and financial management information. The purpose of the e-letter service was to increase knowledge for decision making through information delivered via e-letter, to introduce farmers via a 'push' method to using e-mail and the Internet, and to increase communication and information dissemination from the department to farmers via e-mail and Internet. The e-letter was e-mailed to over 500 recipients. The response has been very positive.

Every year numerous calls are received from Islanders and tourists inquiring about farms which sell directly from the farm gate. As a result of the inquires, the officers compiled a list of farmers across the province who are marketing fresh fruits, vegetables, meats, preserves and other products direct from their farm. A "Fresh from our Farms" directory and website ([www.peifarmfresh.ca](http://www.peifarmfresh.ca)) were created.

The staff also worked closely with staff from other units, sections and divisions assisting with the coordination of workshops and information sessions.

### **Extension Agrologists**

Eight extension agrologists worked out of district offices located in West Prince, Summerside, Charlottetown and Montague. They provided a strong extension service to producers and collaborate with other staff and industry to develop and deliver commodity-specific events at district, provincial, regional and national levels.

Examples of agrologist activities include working with producer management clubs to coordinate their winter programs; assisting with delivery of the Advance Payment Program for Cereals;

serving as the Island technical representative for the Canadian Quality Milk Program; participating with a larger team traveling to Russia to review milk quality issues and provide facility, personnel and milking systems recommendations; conducting an evaluation of potato harvesters to minimize mechanical damage during harvesting; assisting with the delivery of a continuing education program for pesticide certification; and circulating district newsletters to producers. Workshops, information sessions, field days and tours were hosted for Island producers in many commodity areas.

Agrologists act as program advisors to deliver the Future Farmer Program, and along with providing extension advice they assist producers with the completion of their learning plans and in identifying appropriate training and learning opportunities. Specific training sessions on nutrient management and dealing with lenders were hosted for the Future Farmers. Through this program, producers are also eligible for assistance to complete a business plan, receive an interest rebate on loans, and receive a portion of their required deposit for the Canadian Agricultural Income Stabilization Program. Agrologists also serve as the primary contact for producers to access information on a number of federal programs provided under the Renewal chapter of the Agriculture Policy Framework.

Agrologists continue to be proactive in ensuring producers have the information they need to make informed decisions, and the district presence ensures a connection with producers. Decision areas include assisting producers with production and management issues; expansion options; identifying training needs; and farm succession. They are also involved in the development and promotion of departmental policies, programs and services, enhanced environmental farm plans, pesticide certification and awareness and interpretation of legislation.

### **Industry Development Officers/Specialists**

The unit consists of seven industry development officers/specialists and two technical staff. The commodities include: potatoes, dairy, beef, reduced input/organic, vegetable, fruit crops, field crops and farm management. Staff work closely with their corresponding commodity association or board to initiate industry development projects and action items from strategic plans. The specialists remain involved in evaluation of new crops and conduct on-farm research in a variety of crops. The unit has taken a lead role in developing diversification ideas which show potential on Prince Edward Island.

Assistance to farm families in succession planning was an important part of the service provided by this work unit, as well as the implementation of the Future Farmer Program which provides financial assistance to support training and farm development activities for people entering farming.

Staff worked with the dairy industry to host a major marketing event, possibly the largest function ever held to promote Prince Edward Island Holstein genetics. The seminar and sale attracted many key marketers from across the continent and resulted in the marketing of Island genetics from several Island producers at premium prices. The event was successful in promoting and providing visibility for Island Holstein breeders, who continue to be leaders in the Canadian Holstein industry.

Development staff were involved in the investigation into the use of field crops as a source of renewable energy (biofuel). This has the potential to enhance the economic sustainability of crop rotations. Work continues in examining the feasibility of establishing an oilseed processing

facility on Prince Edward Island.

Staff members continue to work closely with farm organizations and provincial and federal counterparts to address Bovine Spongiform Encephalopathy (BSE) issues. Working groups are in place to look at other options as well as cattle identification and feed ban issues to ensure a sustainable future for the cattle industry.

The Island's organic industry continues to develop, attracting new growers as well as those choosing to expand. The Organic Certification Assistance Program reimbursed 75 percent of the cost of certification for certified organic producers, processors and handlers. Support is provided to the Organic Agriculture Centre of Canada through activities and initiatives. Funding and other resources are also provided to ACORN, a regional network of organic producers and other interested supporters.

There has been much activity in the area of fruit crops, including an assessment of the progress of cranberry bogs; completion of a strategic plan to look at the future for the blueberry industry; active work related to the pollination issue; and numerous field days, tours and training events hosted for producers in all fruit sectors.

The specialist group also conducted production trials and demonstrations in a number of commodities, including potatoes, fruit crops, vegetables and cereals.

## **Prince Edward Island Analytical Laboratories**

Prince Edward Island Analytical Laboratories (PEIAL) is an amalgamation of the Soil and Feed Laboratory, the Water Chemistry and Microbiology laboratories. The laboratory reports to both the Department of Agriculture, Fisheries and Aquaculture and the Department of Environment, Energy and Forestry. The laboratory performs a range of chemical and microbiological analyses on environmental and agricultural samples types including animal feed, seed, soil, and water.

The laboratory has recently received renewal of accreditation by the Standards Council of Canada (SCC) in compliance with ISO/IEC 17025. The laboratory received its first accreditation approval in 1997 and has been increasing its scope of accredited programs ever since. The next external audit occurs in February, 2006. The laboratory is also accredited for seed germination with Canadian Food Inspection Agency and the Canadian Seed Institute.

This year the lab has processed over 16,000 agricultural samples with a revenue of approximately \$167,000.

### **Dairy Section**

The dairy section is responsible for the enforcement of the *Dairy Industry Act*. During this fiscal year, there were 301 initial farm inspections with 166 follow-up inspections and 389 on-farm milk quality calls. The laboratory processed 12,119 milk payment samples, 2,981 processed dairy product samples, and 187,567 ADLIC samples.

## Sustainable Agriculture Resources

The Sustainable Agriculture Resources section offers technical advice to farmers and landowners in the areas of soil conservation; integrated pest management; nutrient management; manure management; fuel and pesticide storage; deadstock composting; efficient use of water for irrigation purposes; and site-specific weather forecasting. This section is responsible for the Sustainable Resource Conservation Program (SRCP) which provides financial and technical assistance to Island agriculture producers and land owners to solve specific environmental issues identified in their environmental farm plan.

A complete summary of the projects funded in 2004/05 appears in the following table.

	<b><i>COMPLETED PROJECTS</i></b>	<b><i>GOVERNMENT DOLLARS SPENT</i></b>
<b>Manure storage</b>	12	\$338,339
<b>Soil Conservation</b>	55	\$252,557
<b>Hedgerows</b>	28	\$7,796
<b>Fencing &amp; Watering</b>	43	\$180,271
<b>Fuel Storage</b>	22	\$57,392
<b>Milkhouse Waste</b>	8	\$22,838
<b>Deadstock Composting</b>	1	\$2,829
<b>IPM Protocol</b>	39	\$88,500
<b>Nutrient Management Plans</b>	29	\$26,403
<b>TOTALS</b>	<b>237</b>	<b>\$976,925</b>

The section is also responsible for the delivery, technical assistance, and administration of the Tier 1 component of the Canada/PEI National Water Program. This component deals with on-farm infrastructure for water conservation and sustainable water source development. The National Water Program (NWP) typically funded one-third of the cost of projects, to a maximum of \$5000 assistance per project. SRCP provided an additional one-third funding of the cost for water flow meters. 39 Tier 1 projects were completed in 2004/05. The total value of projects was \$391,207 of which the National Water Program contributed \$84,390 and the SRCP contributed \$26,628. Staff also provided technical assistance and were involved in the installation and management of two Tier 3 National Water Program demonstration projects, both involving the use of drip irrigation.

With respect to Integrated Pest Management, a potato scouting clinic was held in early June and was attended by nearly a hundred farm workers, growers, commercial crop scouts and industry representatives. Under the SRCP, the IPM Protocol Incentive program was expanded to include blueberries as well as cole crops, carrots, rutabagas, potatoes and apples. The pesticide reduction pilot program was continued in 2004 and financial incentives were offered to 16 farms to

demonstrate options for reducing the use of pesticides in commercial agriculture. The IPM Specialist worked with two potato producers and researchers from McCain's to determine the effect of European Cornborer on yield of the Russet Burbank potato variety. This project was initiated as a result of a recommendation made by the commodity-based risk reduction strategy group for potatoes in Prince Edward Island and New Brunswick. This group continues to meet and discuss options for implementation of the recommendations and hopes to wrap up its work by the end of the growing season in 2005. The IPM Specialist was a member of the Implementation Committee that reviewed and developed an implementation plan for pesticide regulation on Prince Edward Island based on recommendations provided by the Environmental Advisory Council. The IPM specialist continues to take part in the minor use pesticides program and represented the needs of Island growers at the National Minor Use Priority Setting meeting.

The department continued its emphasis on nutrient management planning. Nutrient management balance sheets were completed for 5,300 acres of agricultural land in 2004/05 bringing the running total to 23,000 acres. A practical nutrient management training workshop was held in Charlottetown for those individuals who had participated in the Atlantic-based nutrient management training course that was offered at the Nova Scotia Agricultural College in Truro. Participants who successfully complete the workshop and the course will be qualified to develop nutrient management plans for Island landowners. Farm-scale nutrient management research plots continued in 2004/05 with Island producers and agri-businesses in an effort to develop Island-based nutrient recommendation and removal rates. Two streams were instrumented with automated sampling equipment to determine the impact of upstream fertility programs on water quality.

The Sustainable Agricultural Resource staff provided technical assistance to Island land owners for the construction of erosion control structures and/or the establishment of strip cropping on 3375 acres in 2004. Most of this work was done on land that was already in compliance with the *Agricultural Crop Rotation Act.* Very few new requests were received for management plans to comply with the act in 2004 although staff continue to assist land owners with the development of these plans.

Staff were involved with the Prince Edward Island Soil and Crop Improvement Association with a number of on-farm Greenhouse Gas Mitigation Program projects in 2004 including a conservation tillage/scab project on potatoes; split field trials demonstrating nutrient management and agroforestry projects.

The farm weather forecast was offered to 65 producers and interested government and agribusinesses in 2004. Five weather stations were used to provide a specific forecast in three hour increments. Subscribers to the service also received updates on the blight severity index. The weather monitoring network was also used in IPM projects.

Sustainable Agriculture staff continued to provide technical and organizational advice to support industry initiatives such as Environmental Farm Planning and the Greenhouse Gas Mitigation Program. They continue to collect data for the Soil Quality Monitoring project. They provided technical advice to the Soil and Crop Improvement Association for the livestock fencing and watering program. Staff continue to respond to public concerns about farming practices and animal welfare.

# **Fisheries and Aquaculture Division**

## **Mandate**

The Fisheries and Aquaculture Division provides programs and services to both the marine fisheries, aquaculture and seafood processing sectors in order to fulfil its mandate and to achieve its goals of providing quality advice, assistance and information to clients.

In marine fisheries, the division acts as an advocate for the Prince Edward Island fishing industry and takes part in many species advisory committees with the industry and the federal government, which manages marine fisheries resources. The division carries out basic biological research in support of major fish species such as lobster, as well as developmental or emerging species. The division assists the seafood-processing sector with programs to enhance processing of seafood in Prince Edward Island. The division also promotes fish quality through the administration of the Prince Edward Island *Fish Inspection Act* and the *Fisheries Act*, which includes responsibility for licensing, and inspection of all fish-buying stations and fish-processing facilities.

The aquaculture sector continues to make a strong contribution to the fishery and remains a sector with potential for further growth and increased economic returns. The division provides programming to support the growth and sustainability of aquaculture businesses. As well, assistance is provided to encourage new technology in aquaculture, and research is carried out on species that offer potential for culture. Division staff has expertise in all facets of aquaculture production and provides essential technical services to the industry.

## **Division Overview**

The fishing industry employs approximately 9,000 people in the harvesting and processing sectors. Lobster continues to be the leader with a landed value to fishermen of just more than \$100 million. The Island's aquaculture industry, consisting primarily of oysters, mussels and finfish, contributed more than \$33 million in 2004. This sector of the industry continues to grow and create new employment in the province. For other statistics on the fisheries and aquaculture industries, and historical data on mussel landings and values, see Appendices I and II respectively.

The overall economic impact from the fishery, including the service sector, is more than \$350 million. For detailed information on fish landings and values, see Appendix III.

## **Marine Fisheries Section**

The main role of the Marine Fisheries section is to represent the interests of Prince Edward Island within the federal advisory committee process and to assist the Island fishing industry by representing its views.

The Marine Fisheries section also carries out a Lobster Resource Monitoring Program and assists Island fishermen in various scientific projects.

The landed value of the commercial fishery in Prince Edward Island in 2004 was more than \$129 million. Commercially-fished species range from American eels to Waved Whelk. There are more than 1,300 core fishers in Prince Edward Island and during the peak season there are more than 3,000 processing jobs.

## **The Provincial Legal Action Case**

On February 23, 2005, the Prince Edward Island government filed a statement of claim against the Government of Canada and Fisheries and Oceans that challenges the constitutional power of the federal minister to make license and other management decisions. The statement of claim was filed at the Supreme Court of Prince Edward Island.

The statement of claim alleged the Minister of Fisheries and Oceans, by failing to establish and adhere to an open, transparent, accountable, fair and evenhanded process, has violated the rule of law as guaranteed by the Canadian constitution, violated the *Oceans Act* by putting conservation at risk, failed to conform to his own policies, violated his public trust obligations and failed to exercise licensing authority in accordance with the principles of procedural fairness.

The Prince Edward Island government, along with the Island fishing industry, has been seeking to achieve a fair and equitable allocation of a number of species over the past number of years through long and protracted negotiations, but are not close to a resolution. Although the Prince Edward Island government is reluctant to initiate legal action, it appears to be the only alternative remaining to obtain justice for Prince Edward Island fishermen, plant workers and their families.

The statement of claim says that Prince Edward Island's allocation on numerous species, including northern shrimp, gulf shrimp, snow crab and bluefin tuna does not take into account the application of the criteria of adjacency, historic dependence and economic viability. It claims that ground fishermen in Prince Edward Island are being treated differently than those in neighbouring provinces. It further states that the establishment of the herring seiner exclusion zone was made in error and that the herring fishery is being put at risk. It also alleges that partisan and other political considerations have been taken into account when fishery management, licensing and allocation decisions are made.

The provincial government's position is based on a number of fundamental legal principles agreed to by federal and provincial governments, but those principles have been seriously violated by the federal minister. Prince Edward Island's \$350 million fishing industry contributes a larger percentage share to our economy than any other province, yet it continues to be adversely affected by unfair and arbitrary decisions that affect its continued development. The goal is to ensure that fishermen have fair and equitable treatment under the law.

## **House of Commons Standing Committee on Fisheries and Oceans**

Minister MacAdam made an appearance before the House of Commons Standing Committee on Fisheries and Oceans in December 2004. Minister MacAdam spoke to the committee members on a number of fisheries issues facing Prince Edward Island, specifically, the restoration of the 25 fathom exclusion zone for seiners and the allocation inequities that Prince Edward Island fishers currently face as compared to other jurisdictions in Atlantic Canada.

## **Certified Fisheries Organizations Support Act**

On May 20, 2004, an Act to amend the *Fisheries Organization Support Act* received Royal Assent and became law in Prince Edward Island. The *Certified Fisheries Organizations Support Act* as it is now known, requires all core and bona fide fishers on Prince Edward Island, who are not voluntarily members of a certified fisheries organization to pay a support fee to the Minister of Agriculture, Fisheries and Aquaculture. The Minister then forwards the fees collected to the certified fisheries organization. In 2004, there was more than 70 percent participation.

## **Lobster Resource Monitoring Program**

The Lobster Resource Monitoring Program continued in 2004 with the collection of data through at-sea sampling and port sampling. In addition, 103 volunteer fishers from Lobster Fishing Areas (LFAs) 24, 25 and 26A gathered daily data from special and designated traps. This experimental trap program had representatives from 37 Island ports. The information gathered through this program represented more than 30,000 trap hauls and helped to maintain a detailed profile of the harvestable lobster resource caught in Island waters. The department's lobster biologist and three technicians, hired through a contract with the Prince Edward Island Fishermen's Association, sampled onboard commercial lobster boats for a total of 69 fishing days during the spring and fall seasons. Sampling of commercial catches, at ports in LFA 25, collected information on more than 4,500 lobsters.

## **Lobster Research**

In 2004, the division's staff tagged 150 lobsters, both males and females, that were returned to the water during the commercial fishery as required by the prohibited size range set out in the 2004 management plans. The recapture of these individuals during subsequent fishing activity anticipates a better understanding of the movement of these lobsters.

A collaborative project involving the department, the Prince Edward Island Fishermen's Association, Fisheries and Oceans and the Maritime Fishermen's Union saw the placement of acoustic tags on lobsters in LFAs 24 and 25. This project will gather data and allow for a better understanding of lobster movement in the region.

The department continued its financial support by contributing core funding to the Atlantic Veterinary College's Lobster Science Centre.

## **Lobster Management**

As scheduled in the multi-year lobster management plan for the southern Gulf of St. Lawrence announced on April 3, 2003, LFAs 24 and 26A had a 1 mm minimum carapace size increase to 69.5 mm in 2004. The implementation of a prohibited size range (window) of 115 mm to 129 mm whereby all female lobsters in that range were to be returned to the water was also maintained for the 2004 season in LFAs 24 and 26A.

The 2004 lobster fishery management plan for LFA 25 was announced April 22, 2004. It included a minimum carapace size increase to 70 mm, the elimination of the existing prohibited size range for females, and the implementation of a maximum size of 115 mm for females and 129 mm for males. The possession of lobster and fishing gear was prohibited between 9:00 p.m. and one hour before sunrise and the opening date for the season was delayed one week beginning on August 16, 2004.

## **Lobster Landings**

Catches for the 2004 season were approximately 13.9 million pounds in LFA 24; 3.8 million pounds in LFA 26A; and 2.2 million pounds for LFA 25, for a total of 19.9 million pounds. The landings in 2004 were down slightly from 2003 landings of 20.0 million pounds. Historical data on lobster landings and values can be found in Appendix IV.

## **Northern Shrimp**

The department is continuing its efforts to have the Prince Edward Island temporary allocation for northern shrimp given permanent status. Prince Edward Island is the only Atlantic province without a permanent attachment to this fishery. The 2003 TAC rose from 152,102 metric tonnes (mt) to 152,102 mt.

Despite this increase in TAC, the Island quota remained at 1,500 mt. The Prince Edward Island Atlantic Shrimp Corporation administers the Island allocation of Northern Shrimp. For more information please visit the following website: [www.peishrimp.com](http://www.peishrimp.com)

## **Gulf Shrimp**

The total allowable catch in 2004 was 36,100 metric tonnes, which represented a 27.5 percent increase from 2003. Prince Edward Island maintained its temporary status in the fishery and received an allocation of 257 metric tonnes. This allocation is managed by the Prince Edward Island Fishermen's Association.

The department continues to seek permanent status and a minimum allocation of 1,000 mt in this fishery.

## **Snow Crab**

The total allowable catch in Area 12 was set at 26,600 mt; 400 mt of this allocation was used to finance the management of Area 12 snow crab fishery. The Prince Edward Island traditional fleet received 5.0743 percent of the allocation and the Prince Edward Island Fishermen's Association received an allocation of 496 mt. However, 70 percent of this allocation was to be utilized in a rationalization plan for LFA 25.

The department continues to seek an equitable share of the snow crab resource for Prince Edward Island.

The Zone E snow crab TAC was 350 mt. The Prince Edward Island allocation was 43.75 mt and the Island maintains one permanent license in this zone.

## **Toad Crab**

On July 27, 2004, a new multi-year (2004-2006) toad crab co-management arrangement was signed between Fisheries and Oceans and the Prince Edward Island Fishermen's Association. As part of this agreement, the 11 existing exploratory licenses in LFA 24 were converted to commercial licenses and six new exploratory permits were granted in the zone west of Covehead to North Cape. The management measures for 2004 included a season of July 16 to October 1, 2004, and a minimum carapace size of 60 mm.

Staff from the department continued their collaboration with the toad crab fishers and Fisheries and Oceans biologists to collect data that would be used to determine size distribution within the crab population and size at which sexual maturity was achieved. Data was collected both on board vessels during fishing, and at fishing ports as fishermen landed their catch. The information included such things as location of fishing activity, types of traps used, crab size, claw height, and shell condition.

## **Bluefin Tuna**

The 2004 bluefin tuna fishery was revised from a management system of a competitive fishery to a fleet quota fishery. Each of the seven fleets was allocated a quota based on their catch history. Prince Edward Island had 30.52 percent of Canada's inshore tuna quota. This percentage is set for a three-year period from 2004/06 with a review after the 2006 season.

The 2004 Canadian inshore quota was set at 596 mt. The Island received 181.9 mt. The fishery opened on July 26 and ended on August 31, when the entire quota was almost reached. This was one of the shortest seasons on record despite Island tuna fishers limiting their fishing days in hopes of improving fish quality and thus market price. The Island tuna fishers landed 178.49 metric tonnes of their 181.9 tonne quota. The remaining 3.4 mt will be added to their 2005 quota.

Landings in the ex-sector fishery accounted for 26.48 mt with another 0.32 mt in Canso area. In 2004, the Island fleet landed 638 tunas with prices ranging from \$2.00 to \$19.50 per pound. There are 355 licensed tuna fishers in Prince Edward Island, with more than 260 active license holders. The entire Canadian inshore quota was not caught and as a result, 77.7 metric tonnes will be carried over to the 2005 season.

The Prince Edward Island Tuna Working Group, made up of tuna fishers and provincial and federal government representatives, continued to work for a fair system at the annual Atlantic Large Pelagic Advisory Committee meeting.

## **Scallop Fishery**

In 2004, reported scallop landings were 102,958 pounds, an increase of 15 percent from 2003. The value of the landings was approximately \$704,000.

In Area 22 (western Northumberland Strait), the season began on May 3 and ended June 5. Sunday fishing was not permitted and daily hours of operation were from 6:00 a.m. to 6:00 p.m. Meat counts were set at 44 per 500 grams.

The scallop season for the north side (Scallop Fishing Area 23) began July 5, closed September 4, and reopened for a month in early November. The meat counts for the fishery were set at 33 per 500 grams. Scallop fishers in this area maintain a voluntary buffer zone.

The Eastern Northumberland Strait fishery (Area 24) opened November 1 and closed December 15. The maximum meat count allowed in Area 24 was 52 per 500 grams. This area has buffer zones in place to protect lobster habitats along the coastlines of Prince Edward Island and Nova Scotia.

## **Herring**

### *Spring*

For 2004, the Southern Gulf (Area 4T) quota for herring was increased to 13,500 mt from the 2003 TAC of 11,000 mt. This allowed 4,354 mt to be shared between the western fishers and Southeast New Brunswick fishers in Herring Fishing Area (HFA) 16C/E as per the herring management plan. Prince Edward Island fishers landed 1,980 mt. Early herring landings were soft in western Prince Edward Island until the second week of May.

Herring fishing in western Prince Edward Island was concentrated in Egmont Bay during the first two weeks of the season. By late May, herring landings were small, bait was scarce and the price of herring in the first week of June had risen dramatically. By late June, the herring fishing effort greatly decreased as bait fishers directed efforts to the mackerel and blackback fisheries.

### *Fall*

The overall TAC was set at 73,000 mt compared to 62,000 mt in 2003, an increase of 17.7 percent. Due to initial price offers by the processors, many fishers throughout the Southern Gulf refused to fish the first week. Buyers increased their price to eight cents from 5.5 cents. Early landings were soft due to poor weather conditions. The Escuminac/Western Prince Edward Island fishery began on August 29 and finished on September 29. Island fishers landed 9,103 mt, catching 2,098 mt (23 percent) of the shared quota. There are ongoing discussions between Prince Edward Island and New Brunswick fishers of splitting this quota to ensure a fair amount for Prince Edward Island, as weather conditions off North Cape limit their participation and catch.

### **Eastern Fall Herring**

The HFA 16G area (Fishermen's Bank area) quota was set at 8,860 mt. Approximately 80 active herring fishers were in HFA 16G, with the daily trip limit set at 15,000 pounds. The fishery was delayed for a week due to low prices and poor weather conditions. By October 1, only two-thirds of the quota was caught. This is in contrast to recent years as the season usually finished by early to mid-September. Roe yields increased during the last week of September as high as nine percent. Most yields averaged 5.5 percent to 7 percent. The year-end Fisheries and Oceans quota report indicates 6,328 mt landed (72 percent) from the Fishermen's Bank quota.

### **Seiner Fleet**

The New Brunswick seiner fleet, consisting of five mid-shore vessels, was permitted to fish inside 20 fathoms off Prince Edward Island under a scientific license. A cap of 15 percent (2,977 mt) of its total quota was imposed in this area. Only 849 mt was caught from this zone. The department continued its demand for the restoration of the 25-fathom exclusion zone.

The department assisted the industry in carrying out a small scientific project that involved collecting acoustic data to record the size and number of herring schools. This will provide information for the ongoing study by Fisheries and Oceans to fully understand the components of the herring stock.

In mid-March 2005, Fisheries and Oceans announced an initiative to develop a long-term strategy for the herring and mackerel fisheries. Three consultants were appointed to lead the discussions with industry, provincial governments and other stakeholders. A long-term vision will provide guidance to strengthen these fisheries and maximize the benefits to the industry. The department will hold discussions with industry to develop the Prince Edward Island position.

### **Seaplants**

The *Furcellaria* season began on June 1 in District 1, starting a week earlier than in most years. The Irish moss season began on June 15. This fishery occurs in Western Prince Edward Island, with three buyers and up to 60 harvesters.

After opening on June 15, the Irish moss season lasted a very short time due to lack of growth. The

fishers then agreed not to fish Irish moss until July 1. Limited markets were available for the buyers. Final landings for *Furcellaria* were up 6.5 percent to more than 2.2 million pounds at a value of \$157,000. Irish moss landings were down to 11.4 million pounds at a landed value of \$1.3 million.

The department, in conjunction with the Department of Development and Technology, continued to financially assist the seaplant industry through the Miminegash seaplant project, which monitors the progress of the fishery, plant growth and presence of other plant species.

## **Groundfish**

There was a directed cod fishery for the Southern Gulf of St. Lawrence, referred to as Area 4T. Federal Fisheries Minister Geoff Regan announced a 3,000 mt quota for this area for the 2004 season. In 2003, there was a moratorium on cod fishing. This quota is divided based on historical fishing activity by gear type and vessel size. All vessels less than 65 feet using fixed gear are considered as one group.

For the fixed gear fishery, the fleets throughout the Maritimes and Quebec split their quota by area in a manner that no province had a quota by itself. Group "A" area covers Gaspé and Northeast New Brunswick fishers. Southeast Prince Edward Island (LFA26A), Cape Breton and Magdalen Islands share group "C", whereas LFA24 Prince Edward Island fishers and Southeast New Brunswick-based fishers share Group "B". In recent years, fishers from the north side of Prince Edward Island took most of the Group "B" quotas which were assigned to that group.

The fixed gear directed cod fishery for Prince Edward Island (groups B & C) took place in late September for two days. The initial start date was to be September 20 but due to wind conditions, it was delayed for one week. Group "B" fishers had 116 mt to catch. Good catches were realized in ports west of North Rustico. Final landings indicated that more than 180 mt was landed.

Group "C" fishers had a quota of 173 mt. Only five Prince Edward Island fishers took part in this fishery. The industry proposed a handline only fishery for the Group "B" fishers and handline or longline for Group "C" fixed gear license holders.

There was also a directed winter flounder (blackback) fishery with a 1,000 mt total quota for all fleets in 4T. Only 401 mt was landed due to effort and market conditions. The American plaice (flounder) quota was set at 750 mt. Only 400 mt was landed from all fleets. The Island's portion of this fishery is mainly prosecuted by the mobile gear fleet in southeastern Prince Edward Island. A mobile gear fishery opened for American plaice in the eastern part of the Strait on June 22. By-catch levels for cod were set at 30 percent as well as the at-sea observer levels.

In February, Fisheries and Oceans along with the Atlantic Provinces and Quebec formed four cod recovery teams. Prince Edward Island, New Brunswick Gulf, Nova Scotia and Fisheries and Oceans formed the Canada-Maritime Action Team on Cod Recovery. This team's mandate is to work with industry to develop a strategy to rebuild the cod stock in the Gulf of St. Lawrence. A working document is expected to be available by the end of the year.

Charter boat fishers could not catch and retain cod in 2004 despite a continued lobby from the department and the charter boat industry. The department continued to lobby for a continuation of the 2003 arrangement to enable charter vessel operators to release any cod caught while directing for mackerel. The 33 charter boats had to register to get the special license needed for catch and release.

## **Silversides**

The silverside fishery opened on October 1. Early prices were quoted at 40 cents per pound for box-net fish. This starting price was similar to 2003 prices, and increased to 50 cents by the first week of November. Landings were recorded at more than 621,500 pounds but many fishers, through their processor, stored their product to be sold as bait for the 2005 lobster season. This is a relatively new bait product and given the increasing bait costs, the lobster industry continues to look at silversides as alternative bait.

## **Aquaculture Section**

The Aquaculture section is responsible for providing high quality advice, assistance and information to the Island's shellfish and finfish aquaculture sectors. As well, the section administers programs and services to support the Island's estuarine shellfish fishery. In 2004, the landed value of shellfish and finfish products such as mussels, oysters, clams and salmonids was approximately \$35 million. Employment in the sector represented more than 2,000 jobs.

Activities and programs delivered by staff of the Fisheries and Aquaculture Division in 2004/05 were diverse. Staff was involved in providing technical and biological advice to the shellfish and finfish sectors. In addition, staff delivered a number of incentive programs that complemented technical services and assisted in the overall development of the aquaculture sector.

## **Mussel Monitoring Program**

The Aquaculture section continued to deliver the Mussel Monitoring Program to mussel growers. Information was collected in 33 areas representing 21 river or bay systems, which are utilized for spat collection and/or grow out. The program assisted growers to manage their lease sites by providing information on the timing of mussel spatfall, mussel meat yields, water quality, and presence of potentially harmful algal species.

The bulk of the program operated during the ice-free season, with a focus on mussel spatfall prediction between May and July. Monitoring for potentially harmful algae occurred from September to December and was carried out periodically on samples collected through the ice in the winter months.

Information collected through the Mussel Monitoring Program was communicated to industry via a web site, voice-mail system and a summary report at year-end.

## **Invasive Species**

Since 1997, six species have moved into waters surrounding Prince Edward Island and have negatively impacted the shellfish industry. In 2004/05, work continued on these invaders to monitor their distribution and attempt to lessen their impact on the shellfish sector. Invasive species related issues consumed a large percentage of staff time.

The presence of colonial tunicate species on mussel crop and gear in Savage Harbour were first reported to the department by industry in December. These species were identified as *Botrylloides violaceus* (the violet tunicate) and *Botryllus schlosseri* (the golden star tunicate). Department staff surveyed Savage Harbour to determine the extent of the infestation. The violet tunicate seems to be the larger concern of the two species as it was present in much greater biomass.

Division staff is involved in developing a research project in conjunction with the Prince Edward Island Aquaculture Alliance to study the biology and the impact on mussels of the two colonial tunicate species. As well, mitigation strategies are tested in the study.

The clubbed tunicate (*Styela clava*) has had a serious impact on the shellfish industry as it competes for food and space on mussel aquaculture lines. Department staff spent much of the 2004/05 field season performing trials to understand the biology of the clubbed tunicate and test various mitigation strategies to decrease the number of tunicates on mussel socks and gear. The program to monitor the abundance of tunicate larvae in infested estuaries during the summer months continued.

A fourth species of tunicate was identified on mussel crop and gear in Montague River in October 2004. This species, *Ciona intestinalis*, has severely affected mussel farms in Nova Scotia and has caused problems with processing mussels. Division staff worked cooperatively with Fisheries and Oceans staff in surveying Montague and Brudenell Rivers to determine the extent of the infestation.

Department staff carried out projects to evaluate the level of risk of releasing whole tunicates, or viable tunicate eggs and larvae associated with processing tunicate-infested mussels. Staff continued to work with mussel processing plants to assess different types of effluent treatment equipment and to provide advice on the installation of treatment systems.

Department staff remained involved with the *Styela Clava* Action Research Group (SCARG). This group consists of the Prince Edward Island Aquaculture Alliance, Fisheries and Oceans, Atlantic Veterinary College and the Fisheries and Aquaculture Division. The SCARG coordinates the research carried out on the clubbed tunicate in Prince Edward Island.

The distribution of the green crab (*Carcinus maenas*) was monitored and biological data collected. The distribution of the green crab did not change from 2003. The size of the population continues to increase, especially in the eastern portion of the province. The green crab is an aggressive crab species that preys on molluscs and other crustaceans.

Staff continued to monitor the presence of the oyster thief (*Codium fragile*) that is affecting oyster resources in Malpeque Bay and the Enmore-Percival area.

Division staff coordinated an invasive species awareness campaign during the summer of 2004. The purpose of this campaign was to promote the awareness of invasive species that will help prevent their spread. The campaign consisted of three activities. Signs were placed at 43 wharfs and boat launches around the province with information on invasive species. Radio ads ran during July and August raising the awareness of invasive species to recreational boaters. Finally, students with the Department of Environment and Energy's Environmental Futures Program visited most of the Island's marinas and boat slips promoting the awareness of invasive species. They handed out information brochures with an attached floating key chain and gathered information on recreational and commercial boaters' knowledge of invasive species.

### **Winter Oyster Mortality**

The project to study factors that might affect over-winter survival of oysters in Bedeque Bay continued. The research project was sponsored by the Prince Edward Island Shellfish Association with funding under the Aquaculture and Fisheries Research Initiative and the P.E.I. Atlantic Shrimp Corporation.

Biologists and technical staff from the Atlantic Veterinary College, Fisheries and Oceans, and the department are collaborating to look at factors such as eutrophication, winter duration, disease and saltation as possible factors.

### **Oyster Larvae Monitoring Program**

During the summer of 2004, the Aquaculture section began to formalize an oyster larvae monitoring program. In past years it had been incorporated into the mussel monitoring program. A summer student was hired to coordinate the program from the Ellerslie Fisheries Station. Thirteen locations representing six oyster seed collection areas were monitored at least twice per week from the first week of July to the third week in August. Larvae size and abundance were reported to industry using a voice-mail system. Shell strings were also placed in several of the major spat collection areas to monitor spat-fall.

### **Oyster Shellbed Cultivation**

Division staff continued to work closely with representatives of the Queens County Shellfish Association to carry out a project to cultivate oyster shellbeds in the West River and North River. The technique of exposing clean shell for oyster spat to attach can be inexpensive, yet result in positive returns for the oyster fishery. A vessel equipped with a de-silter made of a sleigh assembly and two rows of steel teeth was used. Seventeen plots were cultivated, covering approximately 76 acres. The vessel operated for approximately 66 hours between June 22 and July 23.

### **Oyster Diseases - MSX and SSO**

Department staff continued to work closely with Fisheries and Oceans officials to monitor oyster stocks for the presence of MSX and SSO. The parasite causing MSX has not been found in Prince Edward Island oyster stocks. SSO has been found in Island oysters, however at non-lethal levels. Importing oysters from areas in the Bras D'or Lakes, Nova Scotia is prohibited by Fisheries and Oceans.

### **Conditional Shellfish Openings**

In 2004/05, division staff continued to work with shellfish leaseholders in the Vernon-Orwell River system to maintain conditional opening for the harvest of oysters and quahaugs. The conditional opening was a joint effort of the Canadian Food Inspection Agency, Fisheries and Oceans, Environment Canada, the department and affected shellfish growers. The conditional status of a section of Cardigan River was lifted. Department staff carried out water and shell stock collection.

A Memorandum of Understanding was established in Hope River to allow an oyster dealer to hold market product on a lease during early winter.

### **Assistance Programs**

The Fisheries and Aquaculture Division delivered two incentive programs to the aquaculture sector. Under the Aquaculture Technology Program, six projects were approved, representing a government contribution of \$39,500. Under the Environmental Practices Program, two projects were approved for a government contribution of \$18,700. These programs assisted the industry to evaluate new technologies and improve the environmental sustainability of aquaculture.

A total of \$80,000 was approved for the Prince Edward Island Shellfish Association to carry out oyster enhancement activities on public fishery grounds. Projects included seed collection, oyster relays, shell bed cultivation and shell spreading. Each project is carried out with a goal to either improve oyster quality or increase the acreage of public oyster grounds. The Association cost-shared the oyster enhancement activities. Landings in 2004 were recorded at 7.35 million pounds, up nine percent from 2003. The long-term commitment of the department to the enhancement of the public oyster fishery has resulted in increases of landings, and therefore, opportunities for oyster fishers.

The department continued to support the Atlantic Veterinary College's Shellfish Aquaculture Research Program. A contribution provided the college with the necessary infrastructure and research support to attract funding and conduct research projects identified by, and relevant to, the Island shellfish industry.

The department supported the Prince Edward Island Aquaculture Alliance under the Fisheries Organization Support Fund. The Alliance is the voice of the Island aquaculture industry and its efforts have been instrumental in addressing numerous research, development and regulatory issues of the aquaculture sector.

### **Aquaculture Leasing Program**

The department continued its partnership with the aquaculture industry to provide management advice to Fisheries and Oceans for delivery of the Aquaculture Leasing Program. The Lease Management Board met on a number of occasions to oversee development of work plans, financial plans, and the policy framework of the program. The department was also represented on a Referral Committee and gave advice on applications for new sites and other transactions. Under the Aquaculture Leasing Program, Fisheries and Oceans makes the final decision on leasing matters; however, the industry and province have a greater role in management decisions. All parties contribute financially to the program.

### **Fisheries Services Section**

Staff of the Fisheries Services section provides advice and assistance to clients regarding maintenance of fish quality and production of quality seafood products and administers regulations under the *Fisheries Act* and the *Fish Inspection Act*. The section is also responsible for gathering, compiling and publishing fisheries information including statistical data relating to the maintenance and development of fishery resources.

Section staff undertake development projects for the improvement of fishing ports and aquaculture landing sites under provincial jurisdiction. As well, projects are carried out on the promotion of seafood through a summer food demonstration program called Out of the Sea and Over the Coals and participation in the Linking Land and Sea Program.

### **Licensing**

The Licensing section is responsible for the administration of licenses pertaining to processing, buying and peddling under the *Fisheries Act* regulations. Fish processing licenses are divided into four categories: primary processing; secondary processing; lobster cookroom (limited to 144 square feet of processing area); and groundfish processing (limited to 750 square feet of processing area). In 2004, the department issued 63 primary processing licenses, one secondary processing license, 19 lobster cookroom licenses, and one groundfish processing license.

Fish buying licenses are issued on a species per buying station basis. The six categories are lobster; other crustaceans; groundfish; pelagic; mollusc; and other fish. During 2004, the department issued 287 lobster, 166 other crustaceans, 94 groundfish, 157 pelagic, 161 mollusc and 10 other licences.

In addition, 13 fish peddling licenses were issued to individuals and/or companies who peddle fish (processed in licensed establishments) to various consumers throughout Prince Edward Island.

Two fisheries inspection officers are responsible to enforce regulations under the *Fish Inspection Act* and the *Fisheries Act*.

### **Dead Mammal Disposal**

The Fisheries Services section is responsible to co-ordinate and pay the costs for removal of dead marine mammals that appear on Island beaches from time to time throughout the year. The majority of these mammals would either be examined in the field by personnel from the Atlantic Veterinary College, or in some cases, the carcasses are transported to AVC for post-mortem examination.

The cost for disposal of dead mammals varies from year to year. When dealing with dead whales, the cost of disposal varies from a low of \$1,500 to a high of \$5,000 per animal. The variables involved are the size, location, condition of carcass, etc.

In the case of seals, decomposed carcasses are buried on the beach and fresh carcasses are transported to the Atlantic Veterinary College for examination. In the majority of cases, conservation officers deliver the carcasses to the college.

Officials in the Environment Division of the Department of Environment, Energy and Forestry approve locations for burial of dead carcasses and a local contractor or an individual in the area carries out the work of disposal. This year, the Fisheries Services section coordinated the removal of 20 seals and three whales.

### **Shellfish Landing Sites**

The Fisheries Services section is responsible for the maintenance of approximately 50 shellfish launching sites in various rivers and bays throughout the province. The maintenance costs of these sites vary depending on the weather conditions. There are continuous erosion problems on the coastlines and contractors are hired periodically to provide gravel, shale, etc. in order to assure that shellfishers have access to the rivers and bays.

The department also lends financial support to assist in the operation of two oyster trailer parks (Lower Bedeque and York Point). These parks were established to allow fishers to live on site, thus cutting down on their travel expenses and allowing more time for fishing. The tenants pay a user fee that helps defer the costs of electricity, sewage disposal, and garbage disposal.

In 2004, the Province purchased 4.5 acres at Hurd's Point to provide land to the Prince Edward Island Shellfish Association to develop a 60-site trailer park. This expansion is necessary to accommodate the increasing number of fishermen who have permanent residence in West Prince but fish out of Bedeque Bay in May and June. This will allow the fishermen to live in the trailer park to reduce their operating expenses. Once the park is established, the Prince Edward Island Shellfish Association will operate the facility.

## **Quality Management Project**

A Quality Management project initiated in 1999 assists small and medium-sized seafood processors to enhance their quality systems to meet new requirements of the Federal Fish Inspection Regulation administered by the Canadian Food Inspection Agency (CFIA). The project evolved into a joint effort between the department and the Prince Edward Island Seafood Processors Association, utilizing funding from the Prince Edward Island Atlantic Shrimp Corporation.

Work done this past year provided assistance to the plants in the implementation of their Quality Management Programs developed in the previous phase of this long-term project. A private consulting firm, Innovative Quality Solutions, provided the required technical services and expertise through the work plans directed by a Quality Management Working Group Committee comprised of representatives from the department and the Prince Edward Island Seafood Processors Association.

## **Seafood Promotion**

The department participated in the Linking Land and Sea summer program in co-operation with the Prince Edward Island Association of Exhibitions. This program promotes seafood by showing various ways that seafood can be prepared. These promotions are done at various events such as Old Home Week, Summerside Lobster Carnival, Northumberland Fisheries Festival, Tyne Valley Oyster Festival, and numerous other exhibitions.

The department had a busy summer with the seafood promotion program, Out of the Sea and Over the Coals. This program has been in operation for over 20 years, bringing the sizzling taste of seafood from the barbecue to thousands of people, visitors and Islanders. Two summer students attending fairs, exhibitions, national and provincial parks, Visitor Information Centres, campgrounds, and other tourist areas in the province operated the program.

The department was a sponsor of the 2004 Prince Edward Island International Shellfish Festival, hosted by the Prince Edward Island Aquaculture Alliance and the Prince Edward Island Shellfish Association. As well, department staff helped organize several of the events. The Prince Edward Island International Shellfish Festival has grown into one of the largest promotions of shellfish in Eastern Canada, attracting thousands of visitors annually.

## **Aquaculture and Fisheries Research Initiative**

The Prince Edward Island Aquaculture and Fisheries Research Initiative (AFRI) encourages short-term applied or developmental aquaculture and fisheries research in partnership with individuals, business and organizations. The initiative began with an initial commitment of \$800,000 from the provincial government and the government continues to enhance the budget on an annual basis. A board of directors representing government, research agencies and industry manages AFRI. A copy of AFRI's Annual Report for 2004-2005 is available through the Department of Agriculture, Fisheries and Aquaculture.

## APPENDIX 1

### Prince Edward Island General Fisheries and Aquaculture Facts: 2004

1)	Core fishers	1,313
	Non-Core fishers	4,137
	<b>Total</b>	<b>5,450</b>

2)	<b>*Vessels(Registered)</b>	<b>Length (feet)</b>	<b>Number</b>
		< 35'	7
		35' - 39'11"	94
		40' - 44'11"	1,173
		45' - 49'11"	2
		55' - 59'11"	1
		64+	1
		<b>Total</b>	<b>1,278</b>

\* The above table indicates those vessels that are registered by the Dept. Of Fisheries and Oceans. A number of smaller vessels used in the estuarial fisheries are not registered thus are not included in the total above.

#### 3) Licences by Species:

Species	#	Species	#
Groundfish	889	Gaspereau	22
Herring	870	Bar Clams	20
Mackerel	1,279	Quahaugs (Ocean)	8
Tuna	359	Quahaugs	71
Scallops	398	Molluscs (unspec)	750 (includes spring oyster)
Lobster 26A	405	Squid	265
Lobster 25	261	Marine Plants	293
Lobster 24	639	Swordfish	168
Eels	788	Smelts	437
Rock Crab	91	Oysters (Fall)	1208
Silversides	84	Mussels	884
Snow Crab	30	Soft-shell Clams	13
Bait	1,969	Whelks	2
(Herring, mackerel & gaspereau)			
<b>Total Licenses for Prince Edward Island</b>			<b>13,580</b>

#### Permits by Species:

	Sea Urchins	9
	Toad (Spider) Crab	15
	Shark (unspecified)	28
4)	*No. of acres leased for mussel culture	10,748
	No. of mussel culture sites	286
5)*	No. of acres leased for oyster culture	6,917
	No. of oyster culture sites	759
6)*	No. of acres leased for other shellfish culture (quahaugs, clams & scallops)	342
	No. of other shellfish culture sites (quahaugs, clams & scallops )	44
7)	No. of finfish culture sites	6
8)	No. of employees in processing plants (approx. maximum at peak season)	2500
9 )	No. of provincially licenced and federally registered export plants (not including buying stations)	45
10)	No. of provincially licenced non-export plants	21
11)**	No. of major shellfish shippers	16
12)	No. of finfish processors	2
13)	No. of sea plant companies	3

\* as of December 31, 2004 and is subject to change; \*\* included in # 9 above

**Core Fisher** - is a registered fisher who is the head of an active fishing enterprise (i.e. had fished full-time for the previous two years), had a vessel in the fishery, and had Bonafide status and held one key licence (snow crab, lobster A, groundfish - not handline, scallop, tuna, and herring)

**Source:** DFO, Charlottetown & Moncton and PEI Dept. of Agriculture, Fisheries & Aquaculture

**APPENDIX II  
Prince Edward Island  
Mussel Landings and Values: 1980-2004**

<b>Year</b>	<b>Metric Tons</b>	<b>000's Dirs</b>
1980	40	54
1981	47	51
1982	69	107
1983	162	233
1984	285	407
1985	464	562
1986	1,218	1,880
1987	1,036	1,712
1988	1,441	1,405
1989	2,444	2,946
1990	2,697	2,675
1991	3,483	4,574
1992	4,179	4,959
1993	4,789	4,972
1994	5,949	6,321
1995	7,472	8,596
1996	8,821	10,693
1997	9,976	12,096
1998	12,465	15,110
1999	13,892	16,845
2000	17,899	21,703
2001	17,513	23,160
2002	16,785	22,202
2003	16,830	22612
2004	17,576	23249

**Source: Fisheries and Oceans Statistics Division, Moncton,  
New Brunswick and Prince Edward Island  
Department of  
Agriculture, Fisheries and Aquaculture**

**APPENDIX III  
Fish Landings and Values**

	2003		2004	
<b>MOLLUSCS &amp; CRUSTACEANS</b>	<b>Weight (Lbs)</b>	<b>Value (\$000)</b>	<b>Weight (Lbs)</b>	<b>Value (\$000)</b>
<b>LOBSTER</b>	20017864	108308	19905972	100099
<b>SNOW CRAB</b>	3,452,778	10,329	5,624,504	16864
<b>ROCK CRAB</b>	4,547,075	1132	5,323,815	1356
<b>SPIDER CRAB</b>	1,137,700	284	1,043,294	416
<b>BAR CLAMS</b>	1,442,747	625	654,910	267
<b>QUAHAUGS</b>	1,876,459	2,509	922,122	1004
<b>MUSSELS</b>	37,102,487	23,597	38,747,715	23249
<b>OYSTERS</b>	6,694,693	7,431	7,352,700	6670
<b>SCALLOPS (shucked)</b>	89,723	567	102,958	704
<b>S.S. CLAMS</b>	578,277	839	674,308	960
<b>WHELKS</b>	1,032		32,568	13
<b>TOTAL</b>	<b>76,940,835</b>	<b>155,621</b>	<b>80,384,866</b>	<b>151,602</b>
<b>PELAGICS AND ESTUARIAL:</b>				
<b>BLUEFIN TUNA *</b>	277,604	2,708	394,365	2259
<b>MACKEREL</b>	10,066,087	2,093	10,259,685	2,259
<b>HERRING</b>	35,505,089	4,168	33,432,525	3071
<b>GASPEREAUX</b>	183,269	63	229,788	77
<b>EELS</b>	156,702	269	89,662	186
<b>SMELTS</b>	498,352	256	199,235	67
<b>SILVERSIDES</b>	1,031,152	399	621,617	269
<b>SHARK</b>	11,170	5	5,963	3
<b>DOGFISH</b>			165	
<b>CULTURED FINFISH **</b>	53,552	852	44,305	3256
<b>SKATE</b>				
<b>TOTAL</b>	<b>47,782,977</b>	<b>10,813</b>	<b>45,277,310</b>	<b>11447</b>

\*Additional to Tuna landings made by fishers to P.E.I. ports, landings were made by P.E.I. fishers to N.S. ports as follows:

Year 2003- 125,872 Lbs with a value of \$ 1.2 million. Year 2004- 69,879 Lbs with a value of \$ 0.6 million.

\*\*Cultured finfish species are Rainbow Trout, Arctic Char & Atlantic Salmon.

\*\*Landings include production from meat fish farms & fee-fish ponds; values include sales from meat fish farms, fee-fish ponds & hatcheries.

**APPENDIX III (Continued)  
Fish Landings and Values**

	2003		2004	
GROUND FISH	Weight (Lbs)	Value (\$000)	Weight (Lbs)	Value (\$000)
COD	145206	96	635999	371
HAKE	5,112	3	6,283	2
FLOUNDER	414258	197	117,947	33
BLACKBACKS	516,996	306	365260	192
YELLOWTAIL	54,984	13	20,730	3
TOMCOD	4,071		6,058	
GREYSOLE	107		76	
OTHER GROUND FISH	13,623	27	56,168	156
<b>TOTAL</b>	<b>1,154,357</b>	<b>642</b>	<b>1,208,521</b>	<b>757</b>
<b>TOTAL FISH:</b>	<b>125,878,169</b>	<b>167,076</b>	<b>126,870,697</b>	<b>163,806</b>
<b>SEAPLANTS:</b>				
FURCELLARIA	2,110,636	224	2,247,690	157
IRISH MOSS	19,854,931	2,509	11,472,674	1,256
OTHER	65,968	8	4,910	3
SEA URCHINS				
<b>TOTAL</b>	<b>22,031,535</b>	<b>2,741</b>	<b>13725274</b>	<b>1,416</b>
<b>TOTAL FISHERY:</b>	<b>147,909,704</b>	<b>169,817</b>	<b>140,595,971</b>	<b>165222</b>

Source: Statistics Division, Gulf Region, Fisheries and Oceans  
Prince Edward Island Department of Agriculture, Fisheries and Aquaculture (Fisheries and Aquaculture Division)

**APPENDIX IV**

**Lobster Landings and Values 1920-2004**

Q = Quantity in millions of pounds    V = Values in thousands of dollars

Year	Q	V	Year	Q	V	Year	Q	V
1920	8.3	703.90	1950	9.1	1,963.00	1980	12	15,458.00
1921	6.4	255.30	1951	8.3	1,702.00	1981	12	18,519.00
1922	8.8	651.40	1952	8.4	1,849.00	1982	12	22,599.00

**APPENDIX IV  
Lobster Landings and Values 1920-2004**

**Q = Quantity in millions of pounds    V = Values in thousands of dollars**

1923	9.7	878.80	1953	7	1,997.00	1983	16	29,056.00
1924	6.5	564.80	1954	7.4	1,977.00	1984	14	23,137.80
1925	7.9	661.10	1955	8.3	2,324.00	1985	15	33,591.90
1926	6.6	601.80	1956	9.7	2,725.80	1986	18	44,494.20
1927	6.3	617.10	1957	8.5	2,456.30	1987	19	49,532.10
1928	6.6	553.10	1958	8	2,510.20	1988	22	56,128.90
1929	7.4	621.50	1959	8.4	2,842.20	1989	21	46,058.00
AVG. 20's	7.5	610.90	AVG. 50's	8.3	2,234.80	AVG.	16	33,857.50
1930	8.1	539.70	1960	10	3,212.30	1990	22	40,348.50
1931	9.4	553.70	1961	9.5	3,055.00	1991	23	48,521.90
1932	12	551.70	1962	8.7	3,218.90	1992	20	59,439.00
1933	9.2	396.20	1963	7.4	3,155.80	1993	20	51,452.00
1934	7.7	536.00	1964	7.8	4,210.80	1994	19	65,398.00
1935	6.4	467.80	1965	8.8	5,176.60	1995	19	79,242.00
1936	6	544.40	1966	7.9	3,925.70	1996	18	66,424.00
1937	5.8	524.80	1967	9	5,228.90	1997	18	71,243.00
1938	7.1	458.80	1968	8.7	5,328.90	1998	19	80,553.00
1939	7	464.40	1969	8.2	5,375.80	1999	19	88,925.00
AVG. 30's	7.8	503.80	AVG. 60's	8.6	4,188.90	AVG.	20	64,455.40
1940	5.6	353.90	1970	8.7	6,231.20	2000	19	87,769.20
1941	6	469.20	1971	8.2	5,860.60	2001	19	103,894.0
1942	6.4	694.80	1972	7.3	6,360.80	2002	20	105,399.0
1943	6	999.00	1973	7.7	7,503.20	2003	20	108,308.0
1944	6.6	1,149.70	1974	6.2	6,347.00	2004	20	100,099.0
1945	8.1	1,503.60	1975	8.6	5,135.50			
1946	7.9	1,982.70	1976	8.5	5,810.50			
1947	6.2	1,070.00	1977	9.1	10,012.00			
1948	6.5	1,411.90	1978	11	16,648.60			
1949	6.8	1,388.40	1979	12	18,073.90			
AVG. 40's	6.6	1,102.30	AVG. 70's	8.7	9,368.30			

Source: Prince Edward Island Department of Agriculture, Fisheries and Aquaculture, Fisheries and Aquaculture Division and Statistics Division, Fisheries and Oceans, Moncton, New Brunswick