

# Atlantic Poultry Research Institute

## NEWSLETTER



June 2001

### CHAIRMAN'S REPORT

Funding support for the poultry research in Atlantic Canada comes from a wide range of sources. I'd like to draw your attention to the list on this page and I would also like to add my personal thanks to these contributors.

The newsletter from APRI is beginning to show the influence of the new research team assembled in Atlantic Canada. We hope you will use this newsletter to keep aware of the research initiatives under way. As you read these updates and have questions about the topics I would encourage you to communicate with the researcher for more information.

Just a word about the 2001 Poultry Research Priority list. The list was assembled based on feedback from sectors of the poultry industry. As such, the list is always a work in progress, and serves to give us an up to date snapshot of the research needs. We rely on the APRI sector Directors to keep us up to date on research needs. Please use them to funnel your ideas to APRI.

As always if I can be of assistance to promote Poultry related research let me know ([danderson@nsac.ns.ca](mailto:danderson@nsac.ns.ca)) or telephone (902) 893-6651.

Derek M. Anderson  
Chairman

### Farewell to one of our Hens

**Ms. Marg Clark** a long time employee with the Nova Scotia Agricultural College as the poultry unit technician has retired after three decades. Her expertise and friendly disposition in poultry will be sorely missed. Thanks for all the help over the years from the Atlantic Poultry Research Team. We are thankful that this hen has spent so much time in support of the poultry industry through teaching and research at NSAC.

### THANK YOU FOR THE FUNDING

*From the Atlantic Poultry Research Institute*  
**Year 2000 CONTRIBUTORS**

- ACA Co-Operative Ltd.
- Agriculture and Agri-Food Canada
- Alltech Inc.
- Atlantic Industrial Minerals
- Chicken Farmers of Nova Scotia
- Maple Leaf Poultry
- Mineral Tech
- Nadeau Poultry Farm Limited
- New Brunswick Egg Marketing Board
- New Brunswick Agricultural Council
- Nova Scotia Egg & Pullet Producers' Marketing Board
- Nova Scotia Department Agriculture & Fisheries
- Nova Scotia Agricultural College
- Nova Scotia Turkey Producers' Marketing Board
- Nova Scotia Agri-Focus
- Nova Scotia Adaptation Council
- Poultry Industry Council
- Prince Edward Island Adaptation Council
- Prince Edward Island Egg Commodity Marketing Board
- Prince Edward Island Poultry Meat Marketing Board
- ShurGain

### Our Loss is Their Gain

**Mr. Alex Oderkirk** of Oderkirk Poultry Consultant Services has recently been hired as a specialist with Agricultural Development Institute (ADI). Many thanks to Alex for his years of hard work with APRI and looking forward to a continued relationship on the APRI Board of Directors serving as Secretary.

Thanks to all who contributed to this issue of the newsletter. We value your comments and look forward to hearing from you.

## RESEARCH UPDATES

The following poultry research factsheets have been published and are available. If you would like to receive a copy or further discuss this research please contact Janice MacIsaac at [jmacisaac@nsac.ns.ca](mailto:jmacisaac@nsac.ns.ca) or (902) 893-6657.

#	Title
1	Wild Radish Seed Contamination of Laying Hen Feed
2	Roasted Full-Fat Soybeans for Turkey Broilers
3	Naked Oats as a Feedstuff for Roaster Chickens
4	Evaluating Whole Wheat Feeding for Broiler Chickens
5	Extruded Full-Fat Soybeans for Broiler Turkeys
6	APRI Broiler Chicken Research
7	APRI Broiler Turkey Research
8	APRI Laying Hen Research
9	APRI Hatching Eggs Research
10	Whole Wheat Feeding of Laying Hens
11	Full-Fat Oilseeds for Laying Hens
12	Problem Weed Seeds in Poultry Feed
13	Evaluating Whole Hulless Barley Feeding for Broiler Chickens

## A Message from Dr. Fred Silversides Agriculture and Agri-Food Canada

We are pretty excited about two research projects that are starting this summer. Chops Viger, a hemp grower in the Valley, has provided about 100 kg of hemp seed meal. Hemp has been legal to grow in Canada since 1998 and growers want to use all parts of the plant. The initial trial will include the meal in laying diets at several levels and evaluate any effect on egg production and egg quality. If the results are promising, we'll expand our studies and hopefully be able to demonstrate, not only another market for hemp products, but also a locally grown alternative to imported soy-bean meal for poultry producers.

Secondly we have started a Master's project to measure the feeding value of four cultivars of wheat grown in Atlantic Canada for broilers and layers. The feeding value of wheat and the need for feed enzymes is variable and depends on the cultivar and the environment that it was grown in. This project is supported by Finnfeeds International, a major enzyme supplier, and it should provide information on the nutrient content of locally grown wheat and whether or not enzymes are needed for all of the Maritime wheat that is fed to poultry.

## A Message from Dr. Bruce Rathgeber Professor, NSAC Plant & Animal Sciences

The 2000/2001 school year at the NSAC was a very enjoyable and rewarding one. This year there were 6 fourth-year students who choose to tackle a research project involving a poultry species for their project seminar course. The presentations at the end of the year were very impressive. The majority of students select their topic when they return in the fall, however, we already have three students committed to poultry research projects for next year.

The poultry facilities at the NSAC continue to run at capacity as APRI projects wait in line for floor space to begin. Some recent encouraging results include projects involving the replacement of antibiotics in the feed with alternatives for growth promotion.

A recent meeting between Nova Scotia egg producers and mink ranchers resulted in some positive communication between the two groups regarding the development of an on-farm unit to humanely dispose of end-of-cycle laying hens for use as a protein source for mink. I look forward to continuing developments as we enter the summer of 2001.

## Poultry Facilities Renewal Committee

After an extensive series of meetings, we have the attention of the powers that be at NSAC and the NS government. Over the last 10 months, we have developed a proposal for renewal of the poultry facilities at NSAC and our committee (Rick Bennet, Steve Eadie, and Glen Jennings, in addition to Alex Oderkirk, Bruce Rathgeber and myself) now have help from the college and the government in raising the funds. We are applying to the Canadian Foundation for Innovation (CFI) for 40% of the total cost (due date May 30). We have been assigned an architect who has engaged a team of engineers to produce drawings and reliable cost estimates. With these, we can not only apply to CFI but we can apply to the provincial government and start our campaign for industry funding. Results from CFI do not come out until January 2002, but we have lots to do in the meantime. Anyone who wants to see what we are planning or would like to see the current state of our research infrastructure, is welcome to give us a call. These buildings will replace the ones built in the 1960's and should let us conduct research that is relevant to Atlantic Canada for the next 30 years.

Dr. Fred Silversides

<b>2001 POULTRY RESEARCH PRIORITY LIST</b>
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Feed

Reducing feed costs  
 Alternative local grains  
 Soybean use  
 Use of biologics (probiotics)  
 Calcium source & particle size  
 Formulation (amino acid vs protein)  
 Sourcing strategy  
 Contamination

Spent layer

Non-food uses  
 Composting

Waste Management

Composting  
 Storage & handling

Layer Management

Lighting programs  
 Pullet-layer management

Egg Products

New products  
 Market development

New Technology

Adaptation

Water Quality

Regional surveys  
 Mineral & Organic Excesses

Alternative Species

Waterfowl

Environmental Quality

Literature review

CHICKEN:

Feed

Efficiencies  
 Enzymes  
 Formulation  
 Sourcing  
 Grain-variety differences



Downgrading

Cellulitis  
 Bruising  
 Proventriculus Extension

Chick Quality

Flock management  
 Hatchery management  
 Chick dehydration  
 Egg size

New Technology

Adaptation

TURKEY:

Health

Shipping & handling  
 Runny manure  
 Coccidia



Feed

Efficiencies  
 Enzymes  
 Other additives  
 Formulations  
 Alternative feedstuffs  
 Fibre level effect  
 Whole grain feeding

Performance

Bird size  
 Feeding strategies  
 Strain effect

## Snippets

Dr. Bruce Rathgeber and Dr. Fred Silversides have been busy attending and making presentations at annual meetings of regional marketing boards to introduce themselves, describe APRI research and present plans for the facilities upgrade.

- March 2      Chicken Producers Association of Nova Scotia, Coldbrook, NS
- March 5      Nova Scotia Turkey Producers, Coldbrook, NS
- March 7      Nova Scotia Egg and Pullet Producers Marketing Board, Truro, NS
- March 14     New Brunswick Egg Marketing Board, Fredericton, NB
- March 28     Prince Edward Island Egg Commodity Marketing Board, Summerside PEI

The **Atlantic Poultry Conference** held February 15<sup>th</sup> and 16<sup>th</sup> in Dartmouth, NS has had another successful year. With 20 exhibitors and over 230 attendees we can honestly say all sectors of the poultry industry were well represented. APRI was heavily involved with organization, as well as an exhibitor and speakers. Copies of the proceedings can be purchased for \$30.00 from the APRI office.



The **Eastern Nutrition Conference** was held May 15<sup>th</sup> and 16<sup>th</sup> in Dartmouth, NS. APRI had poster presentations by Janice MacIsaac as well as three of our grad students, Jennifer Saunders, Kareen Burgoyne and Anita Menon. Dr. Derek Anderson, Chairman APRI was moderator for one of the sessions.

**Welcome and Congratulations to Janet Rafuse** the newest poultry graduate student to join our team. Janet has just finished her undergraduate work at the Nova Scotia Agricultural College winning the Governors General's Silver Medal for the highest cumulative average in an undergraduate program. Janet will be working with Dr. Fred Silversides on wheat cultivar and feeding value for broilers and layers.

**Congratulations** are also in order for **Mr. Ron**



(Left to right) Natasha Clarke, Rena Currie and Janet Rafuse

**Mekers** who was recently appointed as the NSAC Poultry Unit Manager. Thanks for the past few years with APRI and here's to a long and prosperous future working relationship along side APRI. Welcome to **Rowena (Rena) Currie** filling the shoes of poultry research technician working for APRI. **Natasha Clarke** has joined APRI for the summer months as our summer research assistant.

This newsletter is a publication of the Atlantic Poultry Research Institute (APRI). Its role is to keep those interested in poultry research activities in Atlantic Canada informed on the Institutes's plans, activities and achievements.

The purpose of the Atlantic Poultry Research Institute is to further the interests of the regional poultry industry through research. It will endeavor to do this through the following objectives: 1. To serve as a vehicle for consultation amongst all stake-holders in the Atlantic poultry industry regarding research and development needs; 2. To encourage joint participation by industry and research institutions in setting research priorities; 3. To integrate the poultry research and development activities of the Nova Scotia Agricultural College, Agriculture and Agri-Food Canada and the Atlantic Veterinary College into one strong regional program; 4. To solicit funds for poultry research development.