

Jim Bruce wins top WMO prize



Jim Bruce, AES' esteemed former ADM, receives congratulations on winning the International Meteorological Organization Prize. *From left to right:* Mel Cappe, Deputy Minister; Ruth Bruce, Jim's wife; G.O.P. Obasi, WMO Secretary-General; Jim Bruce; Zou Jingmeng, WMO President, and Gordon McBean, ADM, AES.

On October 28, Jim Bruce became the third Canadian to receive meteorology's top award--the International Meteorological Organization Prize.

In a special ceremony in the Downsview auditorium, AES' esteemed former Assistant Deputy Minister received the award from Secretary-General G.O.P. Obasi and President Zou Jingmeng of the World Meteorological Organization.

"Dr. Bruce is recognized as one of the world's most influential speakers in meteorology and climate change," Prof. Obasi said. "His career has been marked by a selfless dedication to the field."

Jim's career was highlighted in an entertaining slide show tribute prepared by AES' David Phillips with his usual flair. Images of Jim at Inland Waters Directorate, AES, WMO and on globe-trotting missions brought back memories and merriment in the crowded Downsview auditorium.

Assistant Deputy Minister Gordon McBean, who hosted the ceremony, complimented Jim on his trailblazing efforts in using science to educate the public and influence policy. "Dr. Bruce has

clearly shown that good science leads to good policy."

Thirty-nine people have received the International Meteorological Organization Prize since 1955, when it was established to honour a member of the meteorological community for outstanding contributions.

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A t m o s p h e r i c E n v i r o n m e n t S e r v i c e

ZEPHYR

Volume 1, number 3

Service
Through
Science



Environment
Canada

Environnement
Canada



Logo unveiled

If you're involved in preparing any departmental publications, signage, or Mosaic treatments, you'd be interested to know that a new Environment Canada logo, inspired by the theme of sustainable development, was recently unveiled. To help integrate the logo into your projects, here's a rundown of the logo's vital statistics and guidelines.

Visual components

Superimposed upon a positive background of a globe is a human form in the negative. The human form divides three major elements: atmosphere, earth and water. Atmosphere (yellow) is represented above the



outstretched arms, with the head also symbolizing the sun. Earth (green) is represented below the arms, and above the legs. Water (blue) is represented below the legs.

Standards

If you're enlarging or reducing the logo, scale it in a uniform manner. Do not move or remove any component apart

from any other. Finally, do not flip the figure; it must appear to face right.

Position

When you place the logo with other graphic elements, ensure there is sufficient "white" space between it and all other elements. If you choose to use

the logo as a background screen with other graphic elements printed on top, ensure the logo is screened to 30 percent or less than its colour.

Colours

The logo can be used in either full or monochrome colour. If you choose colour, use process yellow and process blue as indicated.

JIM BRUCE

...Continued from page 1

Having led the Canada Centre for Inland Waters as well as AES, and having been involved in water pollution, acid rain, global warming and disaster mitigation, Jim noted that the prize symbolized an important step forward for the WMO "to recognize a career spent half in water and half in air."

He was especially honoured to receive recognition for his role "as an interpreter of science, trying to meet management and policy needs."

Jim's contributions were most effectively captured in the congratulatory words of Elizabeth Dodswell, another former ADM of AES: "The entire world has benefitted from Jim's work in meteorology and the environment."

Beverly Pasian

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Published four times a year by the Communications Directorate of Environment Canada, *Zephyr* is a newsletter for and about employees of the Atmospheric Environment Program.

Our mission is to provide quality service through science for the sustainable benefit of Canadians and our environment.

Zephyr is your newsletter.

We would like to hear from you.

Please forward your submissions and story ideas for the spring issue by:

January 30, 1995.

Graphics and pictures are more than welcome.

TO REACH US

Claudia Del Col/Editor-in-chief

ZEPHYR

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Stirring things up for a good cause

Cooking for All Seasons, a new collection of Downsview employees' recipes, has sold like hotcakes while raising dollars for the United Way.

"We've had an excellent response," said cookbook coordinator Norma Loya. "On the first day alone, 224 cookbooks sold in one hour."

With 325 simple and delicious recipes, the book is 30 per cent bigger than Norma's greatest expectations.

"There are so many treasures," said Norma. "Everything from a candle-light dinner with suggested wine and music to an anniversary breakfast that can be cooked up before the car pool arrives at your doorstep. There are meals for crock pots as well as for microwaves, meals for camping as well as for entertaining."

Norma said the book emphasizes quick, simple, tasty recipes submitted by co-workers who know very well how hard



Cookbook creators. Seated: Evelyn Moreno (left), Jane Graves. Standing, left to right: Lilly Schasmin, John Schneider, Norma Loya, Ed Millar and Aston Shim.

Bruce Findlay (appetizers and drinks), Jane Graves (soups and salads), Lilly Schasmin (breakfast and lunch), and Aston Shim and Evelyn Moreno (dinners); Aston and Evelyn went as far as to calculate preparation and cooking times for the dinners--"This isn't easy if you have to work with 126 recipes!" noted Norma;

* Krystina Czaja, Jasmin Paola and Shawn Cadeau, who handled graphics;

it is to prepare proper meals after a day's work.

Norma thanked all employees who contributed to the effort, but especially the team who cheerfully gave up weekends and spare time to meet tight deadlines. A special thanks goes out to:

- * David Grimes, Director of Policy, Program and International Affairs, who gave support and encouragement;
- * the section coordinators: John Schneider and Ed Millar (desserts),

* Albert Wright, who found printers who threw in thick, coloured section dividers at no extra charge;

* Marilyn Schneider, wife of John Schneider, who generously shared her typing skills;

* Joe Knapper, Diane Ruest, Verne Lorde, George Georgopoulos, Jean Degaust, Anna Ambrosini, Cathy Anker, Gary Grieco, Mary Korczak and Joe Shaykewich, who also gave their support.

Of 600 copies printed, less than 14 remain; to order, call Norma at (416) 739-4429. A second volume is not planned.

The collection sells for \$7 but purchasers are encouraged to donate to the United Way.

"What was really heartwarming was that people came back to donate more than once," said Norma. "It was a happy project, from beginning to end."

CRANBERRY PUNCH

THE FRUITED ICE ROUNDS ADD A COLOURFUL TOUCH. FROM COOKING FOR ALL SEASONS

FRUITED ICE ROUNDS

THE DAY BEFORE SERVING, DRAIN 1 CAN PINEAPPLE AND 1 CAN ORANGES; RESERVE SYRUPS AND MIX TOGETHER. INTO MUFFIN TINS, POUR THIN LAYER OF RESERVED SYRUP MIXTURE AND TOP WITH COMBINATION OF PINEAPPLE, ORANGES AND FROZEN STRAWBERRIES. FREEZE UNTIL FIRM. FILL TINS

WITH REMAINING SYRUP MIXTURE AND, IF NECESSARY, WATER.

PREPARATION

IN PUNCH BOWL, COMBINE 1 CAN LEMONADE CONCENTRATE, 1 CAN ORANGE JUICE CONCENTRATE, 1 CAN CRANBERRY COCKTAIL AND 1 BOTTLE OF VODKA OR SODA WATER. REFRIGERATE. TO SERVE, STIR IN SODA WATER AND FLOAT FRUITED ICE ROUNDS ON TOP. MAKES ABOUT 30 SERVINGS.

TOM AND NANCY CUTLER



Adventures in the North Pole icefields

Fred Kodz conquered the ice and stood on top of the world.

From July to September, he was Ice Services Specialist aboard the CCG *Louis S. St. Laurent*, the icebreaker that travelled from Victoria to the North Pole on a scientific voyage of discovery.

Never before had a ship reached the pole by this treacherous Alaskan route, where the ice starts 1000 km further south than on the east coast of Canada.

The *Louis*, the largest and most powerful ship in the Canadian Coast Guard fleet, was newly refitted with a tough ice-shattering bow and five huge engines. Even so, many sceptics doubted that she and her American companion, the *Polar Sea*, would complete the trip.

"We hit the ice at Barrow, at the northern tip of Alaska, which was about 71°N, and it was easy ice all the way up to 82°," said Fred. "Then it got hostile and difficult to manoeuvre the ships. We were at the mercy of the ice."

Every day by helicopter, Fred scouted the ice ahead of the ships, and then reported to the captain and scientific heads, who plotted the day's route and research. "There was a lot of stress and pressure," he said. "Critical decisions were being based on the information that I presented."

Fred, who has nine years' experience with Ice Reconnaissance, encountered a phenomenon that he had never seen before: ten-year-old ice that was thick, hard and brilliant blue.

The *Louis* left no open-water trail; the ice immediately closed in behind. Sometimes stuck for hours, the ship



Party at the North Pole

couldn't go backward over long distances for fear of damaging the propellers. It could only batter away at the towering ice ridges, squeeze between the floes and fight its way north.

In mid-August, it snowed. High temperatures hovered around -5°C.

Fog was another problem. "You couldn't see where to point the ship. If there was a tough piece of ice ahead, you would run into it and stop dead," said Fred.

"We had to go back and forth many times and fight our way forward."

Behind the ten-metre-high ice ridges, hungry polar bears lay in wait for ringed seals. Two scientists counted the bears and took hair and blood samples, to be analyzed for pollution and contamination. Fred helped.

"I went out on the ice, touched the bears' fur, helped weigh them, patted them on the head. That was quite something! First time I did that."

The Arctic Ocean has a delicate ecosystem easily influenced by global

warming and ozone depletion. Yet this ocean is the least understood part of the globe.

On this mission, about 60 scientists mapped the ocean floor, sampled microscopic organisms, traced currents in air and water, analyzed water properties such as salinity, temperature and turbidity, and collected a myriad of other data which researchers will be busy analysing for years to come.

"There was so much work to be done that the time passed very, very quickly," said Fred. "Most of the people were doing double duty. In my case, I was doing a lot of computer work and communications after my regular duties."

At last, on August 22, the expedition reached its destination. "When we reached the North Pole, everyone breathed a sigh of relief," said Fred. "We had been working hard to get there and do good science and we achieved both. We were pleased."

The Arctic explorers celebrated with a party, erected a signpost bearing all their names and witnessed the first
Continued on page 5...



New Downsview lab almost complete

Goodbye outdated, cramped, hazardous working conditions...hello modern, spacious, state-of-the-art research facility. Yes, at long last, the new atmospheric chemistry building and labs at Downsview are substantially complete and, as research lab managers will confirm, are long overdue.

In construction terms, "substantial completion" means that the owner (in this case, Public Works and Government Services Canada, or PWGSC) assumes custody of the project and building, with the caveat that the contractor will rectify any deficiencies. As the tenant, AES must identify any concerns that should be addressed prior to occupancy. As is usual with any construction project of this scope, the list of concerns is lengthy. The contractor and PWGSC are working at a hectic pace to rectify any problems. In fact, the project is more than three months ahead of schedule and it looks like we will begin moving in January 1995.

Although progress may appear slow from the outside, internal fit-up of the building is proceeding well, and most of the first floor is complete. Lab furnishings are being installed on the second floor, and the massive mechanical systems, which are crucial to the efficient and safe operation of any chemistry

facility, are undergoing testing. The atmospheric research community will soon be the proud occupant of a state-of-the-art facility, the envy of any chemist.

Full utilization of the labs will proceed over the next three years. The following operations are scheduled to move into the new building in 1995: organic labs, air toxics labs, mercury lab, trace sulphur lab, biogeochemical trace constituent lab, carbon dioxide gas standards lab, and acid aerosols lab.

Circumstances permitting, a walk-through of the new building is being planned for all Downsview staff in the near future. Preliminary arrangements are also being made for an official opening, which will likely take place early next spring. In addition, the Communications Directorate is organizing a contest to name the new facility. Information on these events will be available as soon as we can get past the last major acceptance hurdles.

If you have any questions or comments about the new lab building, please contact Bill Hart, AQRD Coordinator, at (416) 739-4468 (e-mail Hartw@am@aestor), Hans Martin, AQRD Director, at (416) 739-4471, or Collin Stewart, Project Manager, at (416) 739-4146 (e-mail Stewartc@am@aestor).

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legal marriage at the North Pole, conducted by the captain.

Fred was most surprised to find clean ice near Alaska and dirty ice near the North Pole. "It would have gravel on it, sand. One floe had a fishing net frozen in it. In some areas, the ice was totally black. We're not quite sure why. The scientists took some samples for analysis. Our conjecture is that the ice that was close to shore near Greenland has migrated over the years because of currents and winds."

The trip back home, by way of Spitsbergen and Canada's east coast, was shorter and more worry-free; ice conditions were much easier.

The ship arrived home in Halifax on



North Pole signpost: it's 3222 km from home for Ken Asmus of Ice Services in Ottawa.

September 9. The 54-day trip, although arduous, had proved the sceptics wrong.

Would the voyage have been possible without the expertise and hard work of the Ice Services? Maybe, said Fred. "But there would have been a lot more banging and crashing on the ice, and the more crashing and banging you do, the more likely you are to damage something."

For years, Fred had longed to travel on the *Louis* on a scientific expedition through the ice. "It was a hugely impressive, very successful trip, very fascinating, and a phenomenal feeling to be up in the Arctic," he said. "Whether I would go to the Pole again, I don't know. I was happy for the experience but maybe someone else might want to do the next one, if it happens."

Wendy Steere



1994 was a very busy and productive year for the Commercial Services Program, with many successful ventures seeing the light of day, and many promising initiatives in development. So, without further ado, we give you the Top Ten Hits for 1994!

1994 Top Ten Hits!

(1) WEATHER LINE SPONSORS: OUR GREATEST HIT!

Weather Lines across Canada receive 54 million calls annually. To meet increasing demands, Environment Canada sought sponsors who would run a short spot before the recorded weather forecast on the Automatic Telephone Answering Devices. Sponsorships are now financing additional phone lines and upgraded answering devices. More importantly, service to the public is improved. Sponsorships have also resulted in the development of dedicated weather lines for various industries, including snow removal, skiing, snowmobiling, agriculture and travel. This specialized weather information would otherwise not be offered.

(2) "IT'S ONLY ROCK 'N' ROLL BUT I LIKE IT!"

The Rolling Stones played to more than 120,000 Edmonton fans in outdoor concerts in October, and Environment Canada got in on the action.

Our automated "Rolling Stones Weather Line" gave forecasted conditions expected at 8 p.m. and midnight on concert nights. The line was sponsored by the Edmonton Journal and ran from Saturday until Wednesday, in return for

promotion in the newspaper.

The dollar value of the publicity received was in the thousands. The telephone number was promoted on the front page. Banner ads (six columns by 1.5 inches) ran next to full-page Stones features in the entertainment section. In addition, the header on the weather page read "For Rolling Stones Weather Information from Environment Canada, phone...."

(3) 976-WEATHER: "OPERATOR, CAN YOU HELP ME PLACE THIS CALL?"

In December 1993, Quebec Region launched the 976 telephone service for weather and other environmental information in the Montreal area. Callers can get specialized forecasts--snowfall information, climatological data, travellers' and pleasure boaters' forecasts--by dialling a Bell Canada 976 service. There is a charge of 60 cents per minute. One-on-one consultations with an Environment Canada weather specialist are also available through the 976 service for a flat rate of \$2.75 per consultation.

Weather warnings and forecasts for the safety and security of the public continue to be available at no charge via the media, on Weatheradio broadcasts and from Environment Canada offices.

The 976 project in Montreal was declared a complete success. In these days of budgetary constraints and cutbacks, the 976 service has permitted Quebec Region to offer better, more varied environmental services to Montrealers.

National implementation looks promising. Many regions expect to have 900 service lines in place by 1995.

(4) FORECAST PRODUCTION ASSISTANT

The Forecast Production Assistant (FPA) is unique software developed by the Meteorological Research Branch at Environment Canada. Used in weather centres across Canada, FPA helps forecasters view and manipulate the flood of environmental information they receive. The software automates routine processes such as preparing fax charts and composing and typing the text of public and marine forecasts. Forecasters can focus their attention on the analysis and interpretation of weather data.

During 1994, the international meteorological community expressed strong interest in FPA. In March, the software was licensed to OceanRoutes of California and Scotland, which routes international shipping.

(5) ONTARIO AND B.C., "SO HAPPY (AND PRODUCTIVE) TOGETHER"

The *Vancouver Sun* and *Province* feature weather maps and other information custom-designed by Pacific and Yukon



Region. Now the *Windsor Star* is also considering getting press-ready weather information by modem from Environment Canada. Pacific and Yukon Region is willing to share its expertise with graphics software and train staff in the Windsor District Office. This proposal demonstrates how cross-region partnerships can serve clients better and create new opportunities.

(6) CANADIAN AIRLINES: "FLY ME TO THE MOON"

Environment Canada is supplying sophisticated aviation weather graphics directly to Canadian Airlines International's dispatch centres in Calgary, Vancouver and Toronto. Before a flight, pilots can pick up satellite imagery, radar imagery and charts, fed by a dedicated line to government-owned computer equipment in the dispatch centres. Canadian Airlines International was so satisfied with the initial three-year contract with Prairie and Northern Region for service in Calgary that the contract is being expanded to include the additional coverage at Vancouver from Pacific and Yukon Region and at Toronto from Ontario Region.

(7) NO "STORMY WEATHER" SURPRISES FOR HIBERNIA

Nighttime storms won't take Hibernia offshore oil drillers by surprise. In October, under a three-year subcontract with Oceans Ltd. of St. John's, the Newfoundland Weather Centre began providing weather watches, consultations and advisories nightly from 11 p.m. to 7 a.m. Environment Canada is also

From Commercial Services

providing technical support for a Campbell Scientific autostation at Bull Arm, Newfoundland and is giving Oceans Ltd. access to the Environment Canada Bulletin Board Service under separate contract. This partnership is a good example of Environment Canada sharing its expertise and working together with the private sector.

(8) MARKETING THE UV INDEX: "HERE COMES THE SUN"

Environment Canada's trademark Ultraviolet Index has inspired Saitek Limited to develop a watch-type consumer UV meter, the SunGuard (SunClip in the U.S.)

In early 1994, the Hong Kong consumer electronics company signed a license agreement for the UV Index. Environment Canada will receive a license fee based on total sales world-wide. The department also has final approval on any use of the trademark in advertising and users' manuals, and on the appearance of the product itself. This deal ensures the consumer-protection credibility of our trademark.

Saitek Limited intends to spend \$500,000 U.S. in advertising the product world-wide. SunGuard will increase awareness of potentially harmful UV radiation both domestically and globally.

SunGuard was slated to go on the market in November and will be sold at

Consumers Distributing and other outlets nation-wide. The expected Canadian price is less than \$50.

(9) BCTV'S WEATHER MEN: "VIDEO KILLED THE RADIO STAR"

Since July, meteorologist David Jones of Pacific and Yukon Region has been presenting the midday weather, live on BCTV. Dave is backed up by Mark Madryga, also an Environment Canada meteorologist. Dave and Mark went through extensive auditioning and on-air testing with BCTV and were chosen from 20 candidates (the majority from outside Environment Canada). BCTV was so pleased with viewers' reactions that it has just signed a two-year contract with the department.

(10) WEATHER PAGING

Residents in Atlantic Region can now get weather reports by pager. The region recently signed a six-month agreement with InterActive Telecom. InterActive will manage accounts and market the new service, called "Weather Watcher". Environment Canada will provide InterActive with up-to-date weather information. The two parties will share revenues and costs.

The pocket-sized pagers are equipped with a screen capable of displaying 80 characters and 20 messages. Upon receipt of a weather warning, the pager vibrates or emits a tone. The region is particularly excited about this capability.

Chantal Hunter



Coin a slogan, win a T-shirt!

How can you win a "limited edition" Environment Week T-shirt? Simple! Put on your thinking caps, muster up those creative juices and participate in the Environment Week 1995 slogan contest.

Your slogan suggestions should be punchy, fun and catchy to encourage Canadians to be good environmental citizens during Environment Week (June 4 to 10, 1995) and every other week of the year.

Send your slogans to Danielle

Gagnon, Communications, 10 Wellington St., 27th floor, Hull, Quebec K1A 0H3. DOTS GAGNONDA. Phone (819) 994-0053. Fax (819) 953-6789.

The submissions will be evaluated by the Environment Week Planning Team (members are Communications and service representatives from the Central and Regional administrations).

Results will appear in the next issue of *Zephyr*. The deadline for submissions is January 15, 1995.



In the news

ADM FEATURED IN REPORT ON BUSINESS MAGAZINE

Check out the December 1994 edition of *the Globe and Mail's Report on Business Magazine*. Inside you'll find ADM Gordon McBean countering the debate on climate change and confirming the scientific evidence backing the climate change theory. He states, "Even allowing for errors in observation methods, the rise in global temperature appears to have been at least 0.3 °C." He adds, "...uncertainty works in both directions. If you wait too long, it may be too late."

GREEN LANE ON INFORMATION HIGHWAY

On November 9, Minister Sheila Copps announced a new service available to Internet users dubbed Environment Canada's "Green Lane on the Information Highway." The public service will provide Canadians and people across the world

with around-the-clock access to environmental information via computer. The Green Lane also provides direct access to the Minister's office, to other Environment Canada Internet sites, and to a host of other environmental sites on the Internet. Currently, the Green Lane is based in the Atlantic provinces--with more sections soon to be added to the service. Minister Copps' e-mail address is: mincopps@am@ncrsv2.Am.Doe.Ca. The Internet address for the Green Lane in Atlantic Canada is <http://atlenv.Bed.Ns.Doe.Ca/how.Html>

GREENING GOVERNMENT

On November 23, Minister Copps unveiled a new five-part action plan to accelerate the "greening of DOE." Minister Copps stated, "Environment Canada is committed to greening its operations.

Our efforts will help protect the environment for future generations." The plan will target five specific measures:

- * **Buying green.** A new department-wide procurement policy will direct employees to buy green and to use EcoLogo products.
- * **Fleet management.** Vehicle emissions will be reduced by 30 percent from current levels, by the year 2000.
- * **Waste reduction:** A "no waste" program is being implemented in Environment Canada's office buildings.
- * **Energy efficiency:** Energy consumption will be significantly reduced in Environment Canada buildings across the country.
- * **Water conservation:** Following audits at all Environment Canada's buildings, measures will be implemented to ensure that all facilities are using water as efficiently as possible.



New name and new ventures

The Atmospheric Environment Service Information Resource Centre is now the Environment Canada Library, Downsview, Ontario. The library will continue to serve the staff of the Atmospheric Environment Service and welcomes its new clients, the staff of Environment Canada, Ontario Region!

To continue being the major information source for scientists, meteorolo-

gists, informatics specialists, senior managers and every person who works for AES or Ontario Region, the library has adopted a more business-like approach and embarked on new ventures.

Budget cuts and freezes have been accepted and managed by the library, while journal costs increased by 27 percent in one year alone! Online costs have gone up; as well, the ex-

change on the U.S. dollar has not been favourable.

Like other libraries, the library at Downsview is now charging for some of its services, such as interlibrary loans, online searches, and a new service which notifies clients of current journal articles and reports in specific subject areas.

The library at Downsview is also offering associate memberships to consultants and other outside clients in return for additional services. Partnerships with other librarians are another cost-effective approach to service.

The library staff is always pleased to help! From the extensive collection--books, reports, journals, observational data from around the world, archives, the WMO collection, maps, atlases, fiche, CD-ROM and newspapers--staff will find the information you need and deliver it in the format you want: e-mail, internal mail, diskette, DOTS, Teamlinks or Internet.

Maria Latyszewskyj



Seated (from left to right): Roberta McCarthy, Reference Librarian; Maria Latyszewskyj, Head of Operations; Sheila Osborne, Acquisitions Supervisor. *Standing:* Mary Bozickovic, Acquisitions Assistant; Denise Milberg, Cataloguing Librarian; Riad Rahal, interlibrary loans and circulation.

FAST FACTS

* THIRTY MILLION PEOPLE ARE CONNECTED TO INTERNET IN OVER 50 COUNTRIES (900,000 USERS IN CANADA). HOST COMPUTERS AND THE VOLUME OF INFORMATION ARE DOUBLING EVERY SIX MONTHS.

* THE AVERAGE AGE OF THE INTERNET USER IS 23.

* ACCORDING TO STATISTICS CANADA, ABOUT ONE-QUARTER OF CANADIAN HOUSEHOLDS ALREADY HAVE AT LEAST ONE PERSONAL COMPUTER, AND MANY MORE CANADIANS HAVE ACCESS TO COMPUTERS, AND TO INTERNET, AT SCHOOL AND AT WORK.

STAY CURRENT WITH CUSTOM JOURNAL INDEX

Exhausted with trying to keep up with the current journals? No time to scan every issue? Looking for an easy way to stay well-informed on hot trends in research?

The Downsview library offers a service tailor-made for people just like you. We have a software package called "Current Contents on Diskette" (CCOD), which contains the tables of contents of major journals in the fields of physics, chemistry, earth sciences, agriculture, biology, environmental science,

engineering, technology and applied science.

Using this package, we provide you with custom bibliographies of your research interests. A profile of your interests is created and loaded onto our computer. Every two weeks your profile is matched against the recent issues of CCOD and a bibliography is produced. This bibliography is then sent to you via e-mail or internal mail.

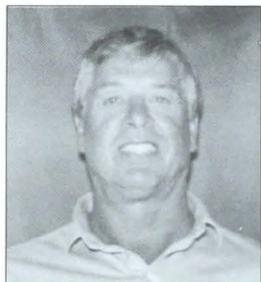
This service saves you time and money while the nominal subscription fees help the library maintain services.



Accolades: year in review

As a new year begins, Zephyr would like to acknowledge those employees (as many names as we could obtain) who received awards in 1994. Congratulations to you all!

MERIT AWARD



Joe Kovalick, a technician in the Air Quality Research Branch, "felt honoured" to receive the Merit Award for his outstanding contributions to Canada's atmospheric environmental research and monitoring.

In citing Joe for this top public service award, Phil Merilees, Director General, Climate and Atmospheric Research, praised Joe's "originality, independent initiative, imagination, sense of quality and respect for deadlines."

CANADA 125 MEDAL

This medal, which honours Canadians who strive to make the country a better place, was awarded to Warren Godson, Heather Mackey, Al Malinauskas, Hans Martin, David Phillips and Roger Street. "It is with their activities and support that AEP has become a successful program and will continue to be so in the future," said ADM Gordon McBean.

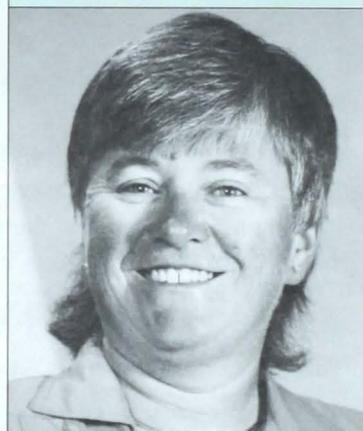
JIM BRUCE ACHIEVEMENT AWARD FOR 1993

Susan Falla received this award for exceptional work performance throughout her 24 years with the Atmospheric Environment Service. Susan has held executive secretarial positions for the offices of the Director General for Weather Services and the Assistant Deputy Minister. She has also organized and managed many workshops and conferences in addition to chairing the Equal Opportunities for Women committee. In short, Susan has been an effective "ambassador for the AEP for years," said Gordon McBean.

RETIREMENTS

Bryan Adamson, Frank Amirault, Jules Arbour, Bob Barrett, Glen Bennett, Cecil Blackwood, Earle Chapman, Bob Cooke, Kirk Dawson, Rick Decker, Ken Fluto, Murray Forbes, Normand Gagnon, Dale Henry, Doug Herrington, Ed Hoepfner, Dave Hunter, Doug Johnston, Howard Kagawa, Gerald Klein, Oskar Koren, Jaan Kruus, Vern LeBlanc, Harold Lee, Jim Mulroy, Patricia Murray, Lorne Murton, Des O'Neill, Stan Nickle, Pierre Pontbriand, Doris Quinn, Ron Santo, Joe Small, Doug Steeves, Ursula Telle, Don Thompson, Lee Tripp, Henry Turchanski, Ted Turner, Lou Walker, Larry Wiggins.

DORIS QUINN RETIRES



METEOROLOGIST DORIS QUINN RETIRED IN JULY AFTER 25 YEARS WITH ENVIRONMENT CANADA AND THE CANADIAN FORCES. THE FIRST WOMAN METEOROLOGIST TO SERVE IN THE ARCTIC, DORIS WAS POSTED AT WINNIPEG, CHURCHILL, REGINA AND RESOLUTE DURING THE 1970s AND AT CFB BADEN SOELLINGEN IN WEST GER-

MANY, ICE BRANCH IN OTTAWA AND CFB COLD LAKE DURING THE EARLY 1980s. SINCE 1984, DORIS HAS WORKED AT THE CANADIAN FORCES SCHOOL OF METEOROLOGY IN WINNIPEG AS INSTRUCTOR, CHIEF STANDARDS OFFICER, CHIEF INSTRUCTOR AND ACTING COMMANDANT. FOR HER OUTSTANDING ABILITY, DEVOTION TO DUTY, PROFESSIONALISM AND EXCEPTIONAL EFFICIENCY, SHE RECENTLY RECEIVED THE WING COMMANDER'S COMMENDATION. AT A RETIREMENT DINNER AND BARBECUE IN SEPTEMBER AT THE WARRANT OFFICER'S AND SERGEANT'S MESS IN WINNIPEG, FRIENDS AND COLLEAGUES WISHED HER A LONG AND HEALTHY RETIREMENT WITH SMOOTH SAILING.



Accolades



Edmonton, June 30. The second Presentation Technician cross-training course in forecasting culminated with a graduation brunch. The graduates were: (back row, left to right) Howard Jacura and Mike Strange of Calgary, Serge Besner and Paul Rose of Edmonton, Greg Pearce of Whitehorse, Ken Nelles of Edmonton, Nick Nickerson of Ottawa, Don McLarty of Edmonton, (front row, left to right) Mike Edwards of Edmonton, Rick Wiess of Calgary, Steve Watson of Edmonton and Jim Edwards of Calgary. Bruno Marquis (front row, right) was an instructor along with Doug Holdham and Ole Jacobsen.

CITATIONS OF EXCELLENCE

The Citation of Excellence recognizes employees whose personal conduct and/or exceptional achievement produced results having a positive impact within the organization. The 1994 recipients included:

* **Earle Chapman**, in recognition of his significant contribution to instrument testing and evaluation over an extended period, which resulted in the use of superior meteorological sensors for international use;

* **Doug Holdham and Dave Brown**, in recognition of their high standard of performance as directors of the cross-training programs for meteorological technicians in Fredericton, Edmonton, Winnipeg, Vancouver and Saskatoon. Not only did they spend most of two years away from Downsview, they also established a high-quality training program and gave up much of their own free time to ensure that the trainees received all of the help that they needed to successfully complete the course. As well, Doug and Dave established a strong cooperative link between the host regions and Training Branch.

LONG SERVICE AWARDS

25-year plaque: John Alexander, Hubert Allard, Dwight Anderson, Bill Appleby, Mel Berry, Rick Berry, Noble Bowes, Byron Brodie, Peter Brooksbank, Judy Carter, Connie Colford, John M. Cook, Gary Cross, Doug Cuthbert, Kirk Dawson, Michel DeGrosbois, Brock Goalen, Hilda Gutzmann, Bill Hart, Myrna Headley, Robert Hoogerbrug, Blaine Jelley, John Kelly, Jim Kerr, Carol Klaponski, Max Krol, Art Leganchuk, Richard Line, Edgar Loder, Wayne Lumsden, Luke Lukawesky, Kirk MacGregor,

Linda Maguire, Stuart McNair, Brian Martin, Hans Martin, Tsuyoshi Maruoka, Andrew McCullough, Wayne Miskolczi, Eldon Oja, Guy Philpott, Ronald Poulton, John D. Reid, Heather Routledge, Don Satkunas, Andrej Saulesleja, Gary Schram, Joe Shaykewich, Shin-Young Shiau, David Short, Larry Sonley, Clarence Spelchak, Malcolm Still, Gary Teeter, John Trane, Eileen Veinot

35-year medallion: Bryan Adamson, Glen Bennett, Lou Berthelot, Ronald Bezant, C.R. Finlay, Arnold Mathus, Ed Semchuk

40-year medallion: James Mulroy

New Report On Mercury

A panel of international experts, including Bill Schroeder of the Climate and Atmospheric Research Directorate in Downsview, has released a report on airborne mercury, considered one of the most persistent and toxic environmental pollutants. The report summarizes the deliberations and conclusions from a workshop held earlier this year near Tampa, Florida. Some of the panel's conclusions include:

* Half of the mercury emissions from human activities tend to be initially deposited within about 1000 km of the emission source.

* Human-generated mercury emissions account for about 50 to 75 per cent of the current total annual input to the global atmosphere; natural sources contribute the rest.

To obtain a copy of *Mercury Atmospheric Processes: A Synthesis Report*, contact Bill at (416) 739-4839.



Saskatchewan's rare Christmas gift

Last Christmas Eve, central regions of Saskatchewan experienced a rare phenomenon of nature: snowrollers.

To the surprise of residents, millions of these natural snowballs scurried across the countryside, towns and backyards. Some were even seen rolling down driveways and roofs!

Snowrollers do not happen frequently in Saskatchewan. A large percentage of the population experienced them for the first time.

Said one older resident of the province, "I've seen Haley's Comet twice but I haven't seen these before!"

Snowrollers can have two shapes: like a donut (hollow centre) or like a snowball (solid centre). The bulk of the rollers December 24, 1993 had a solid centre but revealed a spiral cross-sectional composition. Varying in diameter from 12 to 20 cm with a few as large as 30 cm, they looked like nature had rolled out parts for a child's snowman.



Three meteorological conditions must take place in a precise order for snowrollers to form. First, a crusted layer of old snow exists. Second, a layer of fresh wet snow falls. Third, the air temperature rapidly rises to a degree or two above melting and strong winds blow.

This sequence of meteorological events happened across a band of central Saskatchewan--from north of Saskatoon, across Last Mountain Lake, around and within Regina, and down to the Weyburn area--during the pre-dawn hours of December 24, 1993. (This area is about 375 km long by 50 km wide).

This occurrence was unique in that the phenomenon was widespread and extended into urban areas (where normally the wind is insufficient.)

Fraser Hunter

WEATHER LORE: FACT OR FICTION

Do onions and woolly bears bundle up for a cold winter?

*Onion's skin very thin,
Mild winter coming in;
Onion's skin thick and tough,
Coming winter cold and rough.*

The *Toronto Star* reported thin onion skins this fall. Are we in for a mild winter?

Onions can't predict, writes Reuben A. Hornstein in *The Forecast Your Own Weather Book*. He says the condition of the onion (and all other plants too) depends not on the coming winter, but

on the climate of the preceding growing season.

He also debunks the theory that the relative width of the brown and black fur segments on the woolly bear caterpillar predicts the winter weather to come. "In the autumn of 1952, the bands of fur on the worm supposedly foretold a long and brutal winter; believers rushed out and bought extra snow shovels, weather-stripping and ear muffs--and then experienced one of the mildest winters in years."

THIS NEW FEATURE LOOKS AT THE TRUTH BEHIND WEATHER AND CLIMATE LORE. YOUR CONTRIBUTIONS--SAYINGS OR EXPLANATIONS--ARE MOST WELCOME.

SPRING CHALLENGE

HOW ACCURATE IS THE GROUNDHOG?

According to legend, if the groundhog sees his shadow on February 2, there will be six more weeks of winter. Is this legend true? *Zephyr* challenges you to find out and write in. The best explanations will be published in the spring issue (submission deadline is February 9.)

