KESTAKUM CENTERS DIRECTORY

VOLUME 1
DESCRIPTIVE LISTINGS

1998 23rd EDITION

Agriculture
Astronomy and Space Sciences
Behavioral and Social Sciences
Biological Sciences and Ecology
Business and Economics
Computers and Mathematics
Education
Engineering and Technology
Government and Public Affairs
Humanities and Religion
Labor and Industrial Relations
Law
Medical Science
Physical and Earth Sciences
Regional and Area Studies

DONNA WOOD • EDITOR

1998 28rd EDITION

RESEARCH CENTERS DIRECTORY

In Two Volumes

A Guide to Nearly 14,100 University-Related and Other Nonprofit Research Organizations Established on a Permanent Basis and Carrying on Continuing Research Programs in Agriculture, Astronomy and Space Sciences, Behavioral and Social Sciences, Biological Sciences and Ecology, Business and Economics, Computers and Mathematics, Education, Engineering and Technology, Government and Public Affairs, Humanities and Religion, Labor and Industrial Relations, Law, Medical Sciences, Physical and Earth Sciences, and Regional and Area Studies.

VOLUME 1DESCRIPTIVE LISTINGS

Donna Wood, Editor



DETROIT • NEW YORK • TORONTO • LONDON

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RESEARCH DIRECTORIES PUBLISHED BY GALE RESEARCH

Publication Title	University Related & Independent NONPROFIT	Funded by State/Provincial & Local Government	Funded by National Government	Countries Surveyed
Research Centers Directory	•	~	-	U.S. & Canada
International Research Centers Directory	V	~	V	International (excluding U.S.)
New Research Centers	/	'	V	International (including U.S.)

Introduction

For more than 37 years, Research Centers Directory (RCD) has chronicled the efforts of North America's premier nonprofit research organizations. It is the only comprehensive guide to the programs, staffing, publications, and services of nearly 14,100 centers, laboratories, institutes, experiment stations, farms, research support facilities, technology transfer centers, think tanks, incubators, research parks, and more.

Research has been broadly defined to include fundamental, applied, and developmental studies, as well as data gathering, analysis, and synthesis activities. *RCD* also lists research-support units which operate as separate entities, such as computer centers, statistical laboratories, survey units, information retrieval facilities, and certain museums. A separate section describes university research coordinating offices, technology transfer centers, industrial liaison offices, research parks, and foundations. A special subsection lists an extensive number of computer support centers. Users should consult the following titles published by Gale Research for information on other research organizations:

International Research Centers Directory (IRCD): lists government, university, independent nonprofit, and commercial research centers in more than 150 countries (excluding the U.S.)

Government Research Directory (GRD): includes research units operated by the U.S. and Canadian federal governments

Scope

RCD lists and describes nonprofit research institutes, centers, operating foundations, laboratories, bureaus, experiment stations, and other similar research facilities and activities. In addition to their nonprofit status, these organizations have two other key characteristics:

They are formally identified by specific or distinctive names;

They are established as separate entities for carrying on continuing research programs.

These programs cover all fields of endeavor, including:

- Agriculture
- Environment and conservation
- Medicine and life sciences
- Engineering and technology
- Physical and earth sciences
- Business and economics
- Religion

- Government and public affairs
- Behavioral and social sciences
- Education
- Humanities
- Regional and area studies
- Labor and industrial relations

Arrangement

RCD is published in two volumes. Descriptive listings are arranged into 17 sections by subject; these sections are grouped into five broad categories, as listed on the "Contents" pages. Within each section, entries are arranged alphabetically by sponsoring organization name (if applicable) and then by center name.

- Volume 1 contains seven sections in the areas of life sciences and physical sciences and engineering, four sections in private and public policy and affairs, four sections in social and cultural studies, and one section each on multidisciplinary programs and research coordinating centers.
- Volume 2 contains four indexes.

Each index helps locate specific descriptive listings:

 The Master Index, with tens of thousands of citations, combines all research centers, organizations, and parent institutions in a single alphabetic sort; and also includes former names, and the names of defunct and inactive centers.

- The **Personal Name Index** alphabetically lists the names of thousands of directors, information officers, technology transfer officers, librarians, and other research staff.
- The Geographic Index alphabetically lists centers by the city and state or province in which they
 are based and includes complete contact information.
- The Subject Index includes thousands of terms and cross-references and classifies the research centers by their principal fields of study.

Consult the "User's Guide" on the following pages for details on the arrangement and indexing of entries.

Method of Compilation

Listings in this edition of *RCD* have been significantly updated, with thousands of changes to contact and descriptive information. The inclusion of WWW Home Page addresses continues. New information was obtained directly from center officials through fax and telephone contact and printed materials about the centers.

RCD's Periodic Supplement: New Research Centers

To keep users abreast of the constant changes taking place in organized research, a supplement entitled *New Research Centers* is available between editions of *RCD* to inform subscribers of recently established or newly discovered research centers in the U.S., Canada and internationally.

Available in Electronic Formats

Diskette/Magnetic Tape. Research Centers Directory (along with IRCD and GRD) is available for licensing on magnetic tape or diskette in a fielded format. Either the complete database or a custom selection of entries may be ordered. The database is available for internal data processing and nonpublishing purposes only. For more information, call 800-877-GALE.

Online. RCD (along with IRCD and GRD) is also accessible as File 115 through Knight-Ridder Information Inc.'s DIALOG service. For more information, contact Knight-Ridder Information Inc., 2440 El Camino Real, Mountain View, CA 94040; phone: (415) 254-7000; toll-free: 800-3-DIALOG.

GaleNet. Research Centers Directory (along with IRCD and GRD) are also available on a subscription basis through GaleNet, a new online information resource that features an easy-to-use end-user interface, the powerful search capabilities of the BRS/Search retrieval software, and ease of access through the World-Wide Web. For more information, call 800-877-GALE.

Acknowledgments

Acquisition of data concerning the research activities included in *RCD* and preparation of the individual listings have been greatly facilitated by the cooperation of officials of the listed research units.

Suggestions and Comments Welcome

Users are encouraged to bring new or unlisted nonprofit research units to the attention of the editor. Every attempt will be made to provide information about them in the supplement, *New Research Centers*, and in subsequent editions of *RCD*. Comments or suggestions are also welcome. Although every effort is made to maintain accuracy, errors may occasionally occur; we will be grateful if these are called to our attention. Please contact:

Research Centers Directory Gale Research 835 Penobscot Bldg. 645 Griswold St. Detroit, MI 48226-4094 Toll-free: (800) 347-GALE Telephone: (313)961-2242

Telephone: (313)961-Fax: (313) 961-6815

User's Guide

Descriptive listings in *Research Centers Directory* are organized into 5 broad categories and 17 sections by subject, as listed on the "Contents" page. Entries are arranged alphabetically by sponsoring agency, university, or college name (if applicable) and then by center name within each section.

Shown below is a fictitious listing illustrating the kind of information that is or might be included in an entry. Each numbered item of information is described following the example.

[5]Phone: (517)642-0351

[6] Fax: (517)642-0337

[7] TTY: (517)642-1250

[8] Free: 800-645-3434

[9] Telex: 545869 TIP

[11] Cable: 4456 733

[1] ★3862★ [2] Western Michigan University - D.T.A. Tighe Institute for Planetary Studies

[3] (TIPS)

[4] Dept. of Planetary Sci.College of Sci.Johnson Bldg., Rm. 2101 Neptune Ave.Kalamazoo, MI 48415-1257

[10] Prof. Laura A. Wisner, Dir.

[12] Email: lawisner@tips.wou.edu

[36] Affl.Ctrs: Arizona Observatory.

[13] WWW: http://www.wou.tips./t.html

[14] Fnd: 1974. [15] Desc: Integral unit of Department of Planetary Science, College of Science, Western Michigan University. [16] Ann.Res.Budget: US\$400,000. [17] Staff: 2 Research, 4 Administrative, 3 Graduate, 1 Other. [18] Fin.Sup: U.S. government, local government, industry. [19] AKA: PlanetLab. [20] Membs: Midwest Consortium for Space Research. [21] Res: Planetary geology, image processing, and photogeology, including analysis of spacecraft data. [22] Rsrcs: 32cm refracting telescope; lunar specimens. [23] Databases: Voyager and Apollo analyses of lunar and planetary geology; lunar rock characteristics. [24] Pubs: Planetary Facts Newsletter (monthly); Annual Report. [25] Educ: Graduate Training Program. [26] Mtgs: Interplanetary Space Conference, in May. [27] Scholarships: Competitive Graduate Fellowship; Annual Research Scholarship; Paid Internships. [28] Awards: Spaceman of the Year (annually). [29] Srvcs: Open House (annually); Consultation to government agencies. [30] Lib. Holdings: 10,300 volumes; 500 Journals; 200 Articles; 300 Slides. [31] Lib. Subjects: Lunar, solar, and planetary science. [32] Libn: Ivan van Krimpen, Asst. Libn. [33] Alt. Contact: Lori Dean, PhD, Asst. Dir., Phone: (519)642-0360, Fax: (519)642-1565, Email: idean@plas.wmu.edu. [34] Info. Off: Rachel M. Gerring, Dir. of Res. [35] Tech. Trans. Off: Lucas van Krimpen.

- [1] Sequential Entry Number. Entries are numbered sequentially, beginning with the first entry in Section 1 and ending with the last entry in Section 17. The entry numbers (rather than page numbers) are used in the indexes to refer to listings.
- [2] Research Center Name. Name of the research organization. All names appear in the Master and Geographic Indexes. If the research center is a unit of an academic or government institution, the college, university, or government agency name is listed prior to the research center name. All research units associated with a particular institution or agency are listed under the institution's name in the Master Index.
- [3] Acronym. The official acronym or initialism of the research center is listed in the entry and included in the Master Index.
- [4] Address. Location or permanent mailing address of the research unit. In some instances the address may not be in the same city, state or province, or even country as the parent institution.
- [5] Phone Number. This is listed when provided by the organization and is usually for the main office of activity.
- [6] Fax Number. This is listed when provided by the organization.

- [7] TTY. Telecommunication Device for the Deaf number is listed when provided by the organization.
- [8] Free. Toll-free number is listed when provided by the organization.
- [9] Telex. This is listed when provided by the organization.
- [10] Head of Organization. Name and title of director or head of the center.
- [11] Cable. This is listed when provided by the organization.
- [12] Email. This is listed when provided by the organization and refers to the Internet, unless otherwise indicated.
- [13] Home Page. This is listed when provided by the organization and usually refers to the center's World Wide Web Home Page.
- [14] Founded. The year in which the research unit was established or founded. If the center has changed its name, the founding date is usually for the earliest name under which it was known.
- [15] Description. Information on the governance and present status of center, such as whether it is an integral unit of a university or other organization, is separately incorporated but affiliated with or located at a university, or is itself a private, independent nonprofit organization. In many cases, the unit's affiliated department or division within the parent institution is mentioned, as is the existence of any internal governing body.
- [16] Research Budget. Annual dollar volume of research is provided when authorized for publication by the center. Annual revenues may also be included.
- [17] Staff. Lists numbers of full-time permanent and part-time personnel, including research, administrative, technical, faculty, postdoctoral, graduate, and other staff.
- [18] Financial Support. Listed when provided, including institutional, governmental, and private grants as well as the in-house projects and sales that help maintain the research activities of the organization.
- [19] Also Known As. Alternate or informal names by which the center may be known.
- [20] Memberships. Consortia, networks, and significant associations in which the center maintains membership.
- [21] Research. Principal research fields or projects are briefly described and a statement concerning the center's research mission may also be provided.
- [22] Resources. Unique equipment, facilities, or capabilities maintained by the center, including research facilities and equipment, property, and special collections.
- [23] Databases. Names or descriptions of the center's own electronic databases.
- [24] Publications. Information on types of publications published by the organization, including newsletters, annual reports, magazines, journals, and monographs.
- [25] Educational Activities. Academic programs sponsored by the center, including programs leading to bachelor's, master's, or doctoral degrees, and programs for continuing education, professional education, special certification, and specialized training.
- [26] Meetings. Conferences, colloquia, and meetings held regularly by the center.
- [27] Scholarships. Fellowships, grants, scholarships, internships, and other forms of financial assistance provided to students and fellows who participate in research activities. The description of the scholarship may include information on eligibility, the monetary value of the award, and the number of awards offered.

- [28] Awards. Lists competitive prizes awarded by the organization. The description may include the monetary value, frequency, and number of awards bestowed.
- [29] Services. Clinical services, consulting activities, technical assistance, and public services offered by the center.
- [30] Library Holdings. Lists specific types of publications maintained by the center's library, including volumes, books, journals, slides, audio tapes, and more. A library name may also be included.
- [31] Subjects. Lists the specific subjects or topics of the library.
- [32] Librarian. Lists name of the librarian, and when given, the librarian's official title.
- [33] Alternate Contact(s). Names of other contacts at the organization, such as other officers, alternate telephone or fax numbers. Also listed may be alternate e-mails or WWW home pages.
- [34] Info. Officer. Lists the name of the information officer when provided by the organization.
- [35] Tech. Transfer Officer. Lists the names of the technology transfer officer when provided by the organization.
- [36] Affiliated Centers. Listed here are research organizations that are affiliated with the center or conduct joint research projects with the center.

Indexes

RCD contains four indexes that enable readers to locate information quickly and easily. The indexes refer to listings by entry number, not page number, and are arranged as follows:

- The Subject Index classifies listed research centers by their principal field or fields of research. Research activities are categorized using a list of thousands of main subject headings and cross references. Entry numbers following a subject term are arranged geographically by U.S. state and territories and then by Canadian provinces.
- The Geographic Index alphabetically lists research centers first by the state or province and then by the city in which they are based. Canadian provinces are listed after U.S. states and territories. Complete contact information, including address, phone and fax numbers, e-mail, and WWW home page, is also provided. Entry numbers are listed within stars and are bolded.
- The **Personal Name Index** alphabetically lists the names of all research center personnel listed in *RCD*, followed by the name of their organization and the city and state or province in which it is located. Entry numbers are listed within stars and are bolded.
- The Master Index alphabetically lists all of the research units included; each center is listed by principal name and by keywords in its name. The name of each research unit is followed by the name of an educational institution or government agency if the unit is an integral part of another organization, or by a city-state designation if the unit is independent. Centers that are an integral part of another institution are also listed under the institution's name, along with any independent or separately incorporated centers that have a formal operating agreement with the institution. The latter are designated by a star (★) before the entry number. The Master Index contains two additional categories of listings:

Names mentioned within the text of entries are cited, with a double dagger (‡) appearing before the entry numbers. These names can be former or alternate names of the listed research centers or they can be formally named projects and programs or affiliated centers.

Official acronyms and initialisms of research centers are listed alphabetically in a straightforward, letter-by-letter system; spaces and characters other than letters are ignored. Following the acronym or initialism is the research center name and affiliated educational institution, if any.

Geographical Abbreviations

U.S. STATES AND TERRITORIES

AL	Alabama	MT	Montana
ΑK	Alaska	NE	Nebraska
AS	American Samoa	NV	Nevada
ΑZ	Arizona	NH	New Hampshire
AR	Arkansas	NJ	New Jersey
CA	California	NM	New Mexico
CO	Colorado	NY	New York
CT	Connecticut	NC	North Carolina
DE	Delaware	ND	North Dakota
DC	District of Columbia	OH	Ohio
FL	Florida	OK	Oklahoma
GA	Georgia	OR	Oregon
GU	Guam	PA	Pennsylvania
н	Hawaii	PR	Puerto Rico
ID	Idaho	RI	Rhode Island
IL	Illinois	SC	South Carolina
IN	Indiana	SD	South Dakota
ΙA	Iowa	TN	Tennessee
KS	Kansas	TX	Texas
KY	Kentucky	UT	Utah
LA	Louisiana	VT	Vermont
ME	Maine	VI	Virgin Islands
MD	Maryland	VA	Virginia
MA	Massachusetts	WA	Washington
MI	Michigan	WV	West Virginia
MN	Minnesota	WI	Wisconsin
MS	Mississippi	WY	Wyoming .
MO	Missouri		

CANADIAN PROVINCES AND TERRITORIES

AB	Alberta	NT	Northwest Territories
BC	British Columbia	ON	Ontario
MB	Manitoba	PE	Prince Edward Island
NB	New Brunswick	PQ	Quebec
NF	Newfoundland	SK	Saskatchewan
NS	Nova Scotia	YT	Yukon Territory
			•

Contents

VOLUME 1: SECTIONS 1-17

Inti	oduction viii
	r's Guidex
Geo	graphical Abbreviationsxiii
	LIFE SCIENCES
1.	Agricultural, Food, and Veterinary Sciences
2.	Biological and Environmental Sciences
3.	Medical and Health Sciences245
J.	Including AIDS and cancer research, biomedicine, clinical medicine, dentistry, endocrinology, geriatrics, health care, hematology, human anatomy and physiology, immunology, medical genetics, neurology, organ transplantation, pathology, pediatrics, pharmacology, psychiatry, surgery
	PHYSICAL SCIENCES AND ENGINEERING
4.	Astronomy and Space Sciences
5.	Computers and Mathematics
6.	Engineering and Technology569
υ.	Including architecture and construction, civil and industrial engineering, computer-aided design and manufacturing, electrical and mechanical engineering, energy technology, flight dynamics, hydraulics, manufacturing, materials, radar and sonar technology, robotics, telecommunications
7.	Physical and Earth Sciences697
•	Including atmospheric sciences, chemistry, geology, geophysics, lasers and optics, mining and mineralogy, nuclear and accelerator physics, oceanography, paleontology, petroleum engineering, plasma physics, superconductors
	PRIVATE AND PUBLIC POLICY AND AFFAIRS
8.	Business and Economics775
о.	Including accounting, acquisitions and diversification, advertising, consumer studies, entrepreneurship, finance, free enterprise, government regulation, management, marketing, real estate, small business development
	Continued

Contents

PRIVATE AND PUBLIC POLICY AND AFFAIRS

9.	Government and Public Affairs839
	Including advocacy and public interest, civics, civil and municipal services, community studies, domestic and foreign policy, elections and political campaigns, housing, immigration policy, intergovernmental relations, military, national and international security, urban studies
10	Labor and Industrial Relations915
10.	Including affirmative action, arbitration and negotiation, displaced workers, employee attitudes, human resources, industrial sociology, labor disputes, occupations, pensions and retirement, productivity, self-management, wages
11.	Law929
	Including capital punishment, civil and religious liberty, code enforcement, copyrights and trademarks, forensic science, jurisprudence, justice administration, legal ethics, legislation, patents, prisons, product liability, sentencing alternatives
	SOCIAL AND CULTURAL STUDIES
12.	Behavioral and Social Sciences947
	Including adolescent studies, alcohol and drug abuse, child studies, cognition and perception, ethnic studies, gerontology, human development, marriage and family, minority groups, population and demography, psychology, social conflict and violence, sociology, sports and leisure activities, women's studies
13.	Education
	Including adult and specific education, autonomous learning, continuing education, curriculum development, educational choice and reform, literacy, public and private schools, reading, school planning, teachers and students, teaching materials, writing
14.	Humanities and Religion
	Including anthropology and archeology, art history, biographical studies, creativity, ethics, folklore, history, journalism, linguistics, literature, music, philosophy, theater, theology
15.	Regional and Area Studies1143
	Including Africa, Asia, Europe, Latin America, Middle East, North America, South America, former Soviet Bloc
	MULTIDISCIPLINARY AND RESEARCH COORDINATING CENTERS
16.	Multidisciplinary Programs1183
10.	Including independent multidisciplinary research organizations, local and national government museums, state/province and national government research organizations, national government research agencies affiliated with colleges and universities
17.	Research Coordinating Offices and Research Parks
-·•	Including college and university research offices, grant and contract administration offices, research foundations and parks, technology transfer centers, university-industry liaison programs

Section 1 Agricultural, Food, and Veterinary Sciences

★1★ Accokeek Foundation

3400 Bryan Point Rd. Accokeek, MD 20607 Dr. Wilton Corkern, Pres.

Phone: (301)283-2113 Fax: (301)283-2049 Email: accoround@aol.com

WWW: http://web.gmu.edu/bios/potomac/af

Fnd: 1958. Desc: Independent, nonprofit research organization, operating the National Colonial Farm, an agricultural historical museum project located on the Potomac River at Bryan Point in Maryland opposite Mount Vernon in Virginia. Fin.Sup: Individual gifts, dues. Res: Agricultural practices, products, and tools of the mid-18th century in the middle and southern colonies. Studies genetic development of major crops, farm animals, and wildlife of a Tidewater farm through the authentic reproduction and operation of a working colonial farm. Interests also include silviculture of American chestnut trees, aquaculture, and riverbank erosion, Rercs: Produces seed stocks of major crops of the colonial period, raised as closely as possible under conditions prevailing then, for the National Colonial Farm and other agricultural/historical museums. Pubs: National Colonial Farm Research Reports. Educ: Exhibitions, festivals, tours, and demonstrations. Lib. Holdings: 1,000 Volumes. Subjects: Agriculture, history, and land preservation. Info.Off: Anthony Brooks.

★2★ Adrian College - Peter W. & Sophia Piel Dawson Arboretum

Biol.Dept. 110 S. Madison St. Adrian, MI 49221-2518 Dr. Janet Salzwedel, Dir.

Phone: (517)265-5161 Fax: (517)264-3331

Fnd: 1975. Desc: Integral unit of Biology Department, Adrian College, located 15 miles from the campus. Res: 48-acre wooded, natural science study station.

★3★ Adrian College - Solar Greenhouse

Biol.Dept. 100 S. Madison St. Adrian, MI 49221-2518 Dr. Janet Salzwedel, Dir.

Phone: (517)265-5161 Fax: (517)264-3331 Fnd: 1980. Desc: Integral unit of Biology Department,

Adrian College. Fin.Sup: Foundations, parent institution. Res: Botany, biology and solar technology.

★4★ Agricultural Research Institute (ARI)

9650 Rockville Pike Bethesda, MD 20814 Richard A. Herrett, Exec.Dir.

Email: ari@nalusda.gov

Fnd: 1951. Desc: Independent, nonprofit research organization. Staff: 1 Research, 1 Other. Fin.Sup: Foundations, industry, U.S. government, state government. Res: Argiculture, including water quality, application technology and fate of agricultural chemicals in the environment, efficiency of agricultural production, long range strategies for assuring the well-being of U.S. agriculture, biotechnology, technology transfer, food safety, quality and nutrition, and sustainable agriculture. Pubs: Newsletter (bimonthly): Conference proceedings. Educ: Conferences, workshops, and seminars, open to public. Mems: Board on Agriculture; National Research Council; National Academy of Sciences, Council on Science and Agricultural Technology.

★5★ Agricultural Utilization Research Institute

PO Box 599 Crookston, MN 56716

Desc: Independent, nonprofit research program. Fin.Sup: U.S. government. Res: Agriculture products from state, including research projects to convert corn to ethanol and biodegradable plastics, and to pelletize soybeans for export. Seeks to identify and create new markets and expand existing markets for new or existing commodities, ingredients, and products; develop energy efficient, natural resource-saving production practice; and develop alternative crops and products for emerging markets. Srvcs: Technical assistance to farmers, agribusinesses, and entrepreneurs.

★6★ Agriculture and Agri-Food Canada -Animal Diseases Research Institute

3851 Fallowfield Rd. Box 11300, Sta. H

Nepean, ON, Canada K2H 8P9

Dr. Peter Ide, Dir.

Phone: (613)998-9320 Fax: (613)941-0891

Email: idep@em.agr.ca

Fnd: 1927. Desc: Integral unit of Canadian Food Inspection Agency. Staff: 52 Research, 74 Technical, 74 Other. Fin.Sup: Industry, Canadian government. Res: Diseases of livestock, poultry, and wildlife. Develops antibody and organism detection procedures for certain foreign animal diseases (bluetongue, foot and mouth disease, pseudorables); indigenous diseases; avian leukosis; avian reticuloendotheliosis; Marek's disease; brucellosis; bovine tuberculosis; rabies, plant pathogens and pests, disease transmission potential of in vitro fertilized embryos; detection and control of pathogens in semen; procedures to prevent carrier states. Provides diagnostic and consultative services, evaluates commercial veterinary biologics and produces biological reagents for Canada's Animal Health and plant protection programs. Rsrcs: Biocontainment laboratories, animal facilities, and resource animals. Mtgs: Canadian Animal Pathology Conference (annually); Canadian Poultry Diseases Conference (annually). Srvcs: Rabies diagnosis for animals in eastern Canada. Lib: Reference Collection. Libn: Susan Sherman

★7★ Agriculture and Agri-Food Canada -Atlantic Food and Horticulture Research Centre

32 Main St.

Kentville, NS, Canada B4N 1J5

Dr. P.W. Johnson, Dir.

Phone: (902)679-5333 Fax: (902)679-2311

Email: johnsonw@em.agr.ca

WWW: http://res.agr.ca/kentville/centre/welcome.htm

Fnd: 1911. Desc: National research centre of Agriculture and Agri-Food Canada. Staff: 25 Research, 25 Technical, 40 Other. Fln.Sup: Industry, Canadian government. Formerly: Research Station, Kentville. Res: Horticultural crops, poultry. The Poultry Program, now located at the Nova Scotia Agricultural College in Truro, studies the nutrition and management of poultry meat and egg production. The Tree Fruit Program

studies apple, pear, and stone fruits, including breeding and genetics, physiology, nutrition, management, diseases and integrated pest management. The Berry Crops Program studies native lowbush blueberries, strawberries, raspberries, and wine grapes, emphasizing breeding and clonal selection, nutrition, and weed, disease, and insect control. The Food Research Program emphasizes studies on new processing and packaging technology, microbiology of minimally processed food, and development of quality methodology. The Storage Program develops new processes to prolong shelf life and enhance quality of fruits and vegetables. Rsrcs: 188 hectares at Kentville, Nova Scotia; 76 hectares at Upper Canard, Nova Scotia; greenhouses, growth chambers, cold rooms, food processing pilot plant, supporting shop facilities, and a forest ecology park. Srvcs: Public information center with historical and current program exhibits. Llb: Reference Collection. Subjects: Agriculture. Libn: J. Miner; Email: minerj@em.agr.ca. Pers: Marie Steward, Adm.Off.

★8★ Agriculture and Agri-Food Canada -**Beaverlodge Research Farm**

PO Box 29 Beaverlodge, AB, Canada T0H 0C0 Dr. W.A. Rice, Mgr.

Phone: (403)354-2212 Email: ricew@em.agr.ca Fax: (403)354-8171

Fnd: 1917. Desc: Integral unit of Agriculture and Agri-Food Canada. Ann.Res. Budget: C\$1,800,000. Staff: 13 Research, 4 Support, 16 Technical, 35 Other, Fin.Sup: Industry, Canadian government, provincial government. Formerly: Northern Agriculture Research Centre. Res: Cereals and oilseeds, including canola breeding; environment and soils, including agrometeorology, weed control, soil physics, chemistry, microbiology, fertility, and management; forage crops, including grass seed production; and apiculture, including honey bee management, and pathology. Rsrcs: Land and laboratories located in the Peace River region of NW Alberta, Canada. Pubs: Research Hiliahts (annually): Research Highlights (annually). Educ: Beekeepers field day (annually), in June; General field day (annually), in July. Info.Off: Mr. P.

★9★ Agriculture and Agri-Food Canada -Centre for Food and Animal Research

Central Exp. Farm

NCC Dr., Bldg. 55 Ottawa, ON, Canada K1A 0C6

Dr. S.K. Ho, Dir. Phone: (613)759-1429

Fax: (613)759-1465

Telex: 053-3283 Email: em150mail@ncccot2.agr.ca

WWW: http://www.hgr.ca

Fnd: 1959, Desc: Integral unit of Agriculture and Agri-Food Canada Research Branch, Central Experimental Farm Region, Staff: 69 Research, 10 Support, 51 Technical, 170 Other. Fin.Sup: Industry, Canadian government. Merged: Food Research Centre (1991): Animal Research Center (1991). Res: Animal programs include livestock and poultry biotechnology, animal germplasm conservation, animal feed and product safety, animal behaviour, and environmental management. Food programs include food product quality, food safety, and human nutrition. Rsrcs: Food processing pilot plant, and chemical, biochemical, and food research laboratories at the Central Experimental Farm in Ottawa. Also maintains dairy cattle, swine, poultry, and laboratory animals facilities at the research farm in Ottawa a suburb of Nepean, Ontario. Srvcs: Collaborative studies with industry, in scientific literature, technical reports, bulletins, and popular press releases. Lib: Reference Collection. Subjects: Animal and poultry science, biochemistry, genetics, and nutrition. Info.Off: Donald Leger. Mgr.

★10★ Agriculture and Agri-Food Canada -Cereal Research Centre, Winnipeg

195 Dafoe Rd.

Winnipeg, MB, Canada R3T 2M9 Dr. J.B. Bole, Dir.

Phone: (204)983-5533

Fax: (204)983-4604

Email: jbole@em.agr.ca

WWW: http://res.agr.ca/winn/home.html

Fnd: 1925. Desc: Integral unit of Agriculture and Agri-Food Canada Research Branch, located on the Fort Garry campus of University of Manitoba. Ann.Res. Budget: C\$6,000,000. Staff: 25 Research, 7 Support, 34 Technical, 17 Postdoctoral, 32 Other. Fin.Sup: Canadian government, industry. Formerly: Research Centre, Winnipeg (1997). Res: Breeding, genetics, cytogenetics, and quality of cereals, with the aim of developing disease-resistant cultivars of wheat and oats for production in the Prairie Provinces: cereal pathology, including rusts, smuts, foliar diseases, and viruses; stored product protection, including storage ecology, mycotoxins, and control of pests in stored grain and grain products; and biotechnology research on diseases and quality of cereals to support breeding programs. Educ: Graduate instruction and research training. Srvcs: Quality and pathology screening service for Canadian cereal breeding programs. Llb. Holdings: 10,000 Volumes. Subjects: Botany, plant pathology, cereal breeding, entomology, chemistry, statistics, and biological chemistry. Libn: Mike Malyk. Tech.Trans.Off: John Leyshon.

★11★ Agriculture and Agri-Food Canada -Dairy and Swine Research and Development Centre

PO Box 90 2000 Rte. 108 E.

Lennoxville, PQ, Canada J1M 1Z3

Dr. J.M. Deschenes, Dir.

Phone: (819)565-9174 Fax: (819)564-5507

Email: deschenesim@em.agr.ca.

WWW: http://res.agr.ca/lennox/lennox.html

Fnd: 1914. Desc: Integral unit of Agriculture and Agri-Food Canada. Ann.Res. Budget: C\$5,900,000. Staff: 24 Research, 18 Technical, 49 Other. Fin.Sup: Canadian government. Formerly: Research Station, Lennoxville. Res: Basic and applied studies on dairy cattle and swine, particularly molecular genetics, physiology, endocrinology, nutrition, ethology, systems analysis, and management of farm animals, as well as manure management, Lib: Reference Collection, Subjects: Dairy cattle, swine. Libn: Suzanne Gagne-Giguere.

★12★ Agriculture and Agri-Food Canada -Eastern Cereal and Oilseed Research Centre (ECORC) - (Centre de recherches de l'est sur les cereales et olengincux (CREDO))

Fax: (613)759-1970

Res. Branch, Central Experimental Farm K.W. Neatby Bldg., Rm. 1093

960 Carling Ave. Ottawa, ON, Canada K1A 0C6

Dr. John Dueck, Dir.

Phone: (613)759-1952

Email: dueckj@em.agr.ca

WWW: http://res.agr.ca/ecorc/

Fnd: 1996. Desc: Integral unit of Agriculture and Agri-Food Canada. Staff: 70 Research, 180 Support. Fin.Sup: Industry, Canadian government. Formerly: Centre for Land and Biological Resources Research (1996). Merged: Plant Research Centre (1996). Res: Developing genetically improved pest resistant varieties of corn, soy beans, wheat, barley, and oats with value-added traits; sustainable integrated agronomic systems for the area stretching from Peterborough, Ontario, to Trois-Rivieres/Drummondville, Quebec; diagnose and provide biological information on pests and diseases, and weeds; biological information on germplasm resources for genetic improvement of crops; identification, evaluations and information on biological control and quarantine support to develop control systems; identify and develop detection techniques for organisms that affect food quality and safety; and provide identification, evaluation, protocols, and georeferenced data bases on indicator

species of soil and water quality, and biodiversity change in agro-systems. Rsrcs: Database(s): National Soil DataBase; Canadian Soil Inventory System (CANSIS). Pubs: Scientific Monographs; Annual Report; Maps. Educ: Food-Borne Fungi and Hymenoptera Identification Workshops. Srvcs: Technology transfer; Fungus Culture Service; National Biological Organisms Identification Service. Llb: Reference Collection. Libn: Dena Rabow; Email: rabowd@ em.agr.ca. Info.Off: Bob McClelland. Pers: Marie-Josee Berriault, Contact.

★13★ Agriculture and Agri-Food Canada -Experimental Farm, Fort Vermillion

Box 126

Fort Vermillion, AB, Canada T0H 1N0 Dr. George W. Clayton, Hd. of Res.

Phone: (403)927-3253 Fax: (403)927-3330

Desc: Integral unit of Northern Research Group of Agriculture and Agri-Food Canada, Fin, Sup; Industry, Canadian government, provincial government. Res: Crop production, focusing on minimum tillage studies. Crops include wheat, barley, canola, grasses, and legumes.

★14★ Agriculture and Agri-Food Canada -Experimental Farm, Prince George

RR 8, Site 25, Comp 9 Prince George, BC, Canada V2N 4M6 Klaas Broersma, Contact Phone: (250)561-6924

Fnd: 1939. Desc: Integral unit of Agriculture and Agri-Food Canada Research Branch, administered by Agriculture and Agri-Food Canada Research Station, Kamloops. Fin.Sup: Canadian government. Res: Forage crops and beef production for the central interior of British Columbia, including pasture research, soil studies, and forage quality. Srvcs: Provides scales and exhibition areas to 4-H animal clubs for weighing during field days.

★15★ Agriculture and Agri-Food Canada -Experimental Farm, Scott

Box 10

Scott. SK. Canada S0K 4A0

K.J. Kirkland, Mgr. Phone: (306)247-2011

Fnd: 1910. Desc: Integral unit of Agriculture and Agri-Food Canada Research Branch, Staff: 3 Research, 13 Technical, 2 Other. Fin.Sup: Canadian government, industry. Res: Crop production and protection, including varietal development, weed control, soil fertility, insects, diseases, crop sequences, and tillage practices for cereals and oilseeds. Pubs: Research Highlights; Annual Report (annually). Educ: Producer/Agrologist Field Day (annually), in mid-July.

Fax: (306)247-2022

★16★ Agriculture and Agri-Food Canada -Food Research and Development Centre (Centre de recherche et de developpement sur les aliments)

3600 Casavant Blvd. W.

St. Hyacinthe, PQ, Canada J2S 8E3

Dr. Claude B. Aube, Dir.

Phone: (514)773-1105 Fax: (514)773-8461

Email: crda@em.agr.ca

WWW: http://res.agr.ca/sthya/index.htm

Fnd: 1987. Desc: Integral unit of Agriculture and Agri-Food Canada Research Branch; guided by an advisory committee representing business sector. Ann.Res. Budget: C\$8,500,000. Staff: 22 Research, 40 Support. Fin.Sup: Industry, Canadian government. Formerly: Saint Hyacinthe Food Research Centre (1990). Res: Food industry including bioingredients and plant extracts, meat and dairy industry, and food preservation technologies. Development of new technologies and new products to increase competitiveness. Asrcs: Pilot plants for food engineering, biotechnology, meat processing, and cheesemaking; irradiator; 42 controlled-environment rooms; laboratories for microbiology, biotechnology, biochemistry, plant physiology, engineering, and analytical chemistry; technical and commercial databases. Pubs: ALIMENTECH Industry liaison fax sheet; Publitech Technical Reports; TECH-NO Technology Series. Educ: Periodical seminars, courses, and symposia. Srvcs: Cooperates with small and medium-sized food firms by providing industry R&D services, ISO-9002 accredited; Provides access to Centre staff and facilities: Provides access to collaborative research agreements. Mems: International Institute of Refrigeration; AMPAQ. Lib: Refer-Toupin. Collection. Info.Off: Christian Tech.Trans,Off: Steve Bittner.

★17★ Agriculture and Agri-Food Canada -Greenhouse and Processing Crops Research Centre

Highland 18 East

Harrow, ON, Canada NOR 1G0 Dr. G.H. Whitfield, Contact

Phone: (519)738-2251 Fax: (519)738-3756

Email: whitfieldg@em.agr.ca WWW: http://res.agr.ca/harrow/

Fnd: 1909. Desc: Integral unit of Agriculture and Agri-Food Canada Research Branch. Staff: 30 Research, 55 Scientific, 6 Technical, 3 Engineering, 2 Visiting Academic, 11 Administrative, 1 Professional, 8 Postdoctoral. Fin.Sup: Canadian government. Res: Cultivar evaluation, plant breeding, crop and soil management, physiology, pest control, weed control and management, nutrition, bacterial diseases, microbial control, insecticides management, and greenhouse vegetable production. Databases: Clonal Gene bank. Pubs: Cultivating Concepts (quarterly). Mtgs: Meetings for farmers groups, agricultural/horticultural societies, andother international interests. Srvcs: Tours, by appointment only. Lib. Holdings: 5,000 Monographs, 112 Periodicals. Subjects: agriculture. Libn: Eric Email: champagnee@em.agr.ca. Champagne: Info.Off: Andrea Labaj.

★18★ Agriculture and Agri-Food Canada -Horticultural Research and Development Centre (CRDH)

430 blvd Gouin

St. Jean-sur-Richelieu, PQ, Canada J3B 3E6

Dr. Claude Richer-Leglerc, Prog.Ldr.
Phone: (514)346-4494 Fax:

Fax: (514)346-7740

Email: demarsd@em.agr.ca

WWW: http://res.agr.ca/riche/crdh.htm

Fnd: 1948. Desc: Integral unit of Agriculture and Agri-Food Canada. Staff: 16 Research, 36 Support, 16 Technical, Fin.Sup: Canadian government. Formerly: Research Station, Saint-Jean-sur-Richelieu. Res: Horticulture, precision forming, biological control of insects, weed science, new agricultural products, plant breeding, molecular biology, plant protection, nematology, pesticides, and entomology. Conducts breeding, production, and protection programs, including studies on apples, small fruits, vegetables, ornamental and aromatic plants, post-harvest technology, and storage of fruit and vegetables. Rsrcs: 3 research substations, 21 greenhouse compartments, 15 growth cabinets, and 40 controlled temperature and humidity chambers. Llb. Holdings: 10,000 Volumes. Subjects: Horticulture, plant protection, entomology, chemistry, engineering, and biotechnology. Info.Off: Therese Otis, Agrologist.

★19★ Agriculture and Agri-Food Canada -Indian Head Research Farm

PO Box 760

Indian Head, SK, Canada S0G 2K0

David Gehl, Off.

Phone: (306)695-2274 Fax: (306)695-3445

Email: user@skrsin.agr.ca

Fnd: 1887. Desc: Integral unit of Agriculture and Agri-Food Canada Research Station, Swift Current. Staff: 3 Research, 1 Support, 15 Other. Fin.Sup: Industry, Canadian government, provincial government. Res: Agronomy, including cereals, wheat, winter wheat, rotations and crop sequences, weed/crop ecology, and weed control. Also produces seed of new and

established varieties. Cooperates with local and provincial agricultural representatives and industry. Educ: Open House (biennially); Zero Tillage Field Day (annually). Srvcs: Technical assistance, for farmers and extension workers in southeast Saskatchewan. Tech.Trans.Off: Gordon Parker.

★20★ Agriculture and Agri-Food Canada -Market and Industry Services Branch 801-1800 Hamilton St.

PO Box 8035

Regina, SK, Canada S4P 4C7

Fax: (306)780-7360 Phone: (306)780-5545

WWW: http://acis.agr.ca

Desc: Integral unit of Agriculture and Agri-Food Canada. Staff: 11 Research, 1 Support, 3 Other. Fin.Sup: Canadian government. Res: Agricultural economics and marketing to enhance global competitiveness and increase domestic and International markets. Develops, implements, and evaluates agricultu ral programs within the province and provides regional input on policy analysis and formulation, strategic planning and national programming, market intelligence, and promotion of agricultural products. Lib: Reference Collection. Libn: Susan Yanosik, Libr.Tech.

★21★ Agriculture and Agri-Food Canada -

Morden Research Centre Unit 100, 101 Route 100

Morden, MB, Canada R6M 1Y5

Dr. C.G. Davidson, Mgr.

Phone: (204)822-4471

Email: cdavidson@em.agr.ca

Fnd: 1915. Desc: Integral unit of Agriculture and Agri-Food Canada Research Branch. Staff: 6 Research, 10 Technical, 18 Other. Fln.Sup: Canadian government. Res: Breeding, pathology, genetic resource conserva-tion, and management of oilseed crops (flax); field crops (field peas, field beans), and horticultural crops, including ornamentals. Rsrcs: 627 acres of land at Morden and research arboretum with more than 3.000 accessions. Lib: Reference Collection. Libn: Cheryl

Fax: (204)822-6841

★22★ Agriculture and Agri-Food Canada -Pacific Agri-Food Research Centre, Summerland

Summerland, BC, Canada V0H 1Z0

Dr. Gordon Neish, Contact

Phone: (250)494-7711 Fax: (250)494-0755

Email: neishg@em.agr.ca

WWW: http://res.agr.ca/summer/parc.htm

Fnd: 1914. Desc: Integral unit of Agriculture and Agri-Food Canada. Staff: 53 Research, 53 Technical, 45 Other. Fin.Sup: Canadian government. Res: Horticultural and field crop production and protection, including tree fruits, small fruits, greenhouse vegetables, speciality crops, and forages; on food science and technology on horticultural and special crops; on the cellular and molecular biology of viruses, bacteria and fungi of significance to agricultural crops; on soil resource conservation and land evaluation; and, on poultry production. Libn: Ms. P. Watson. Branch Off: Whitehorse, BC, Canada; Agassiz, BC, Canada.

★23★ Agriculture and Agri-Food Canada -Pest Management Research Centre, Delhi

PO Box 186 Delhi, ON, Canada N4B 2W9 Dr. Frank Marks, Dir.

Phone: (519)582-1950 Fax: (519)582-4223

Email: director@onrsde.agr.ca

Fnd: 1933. Desc: Integral unit of Agriculture and Agri-Food Canada Research Branch, Staff: 9 Research, 11 Technical, 21 Other. Fin.Sup: Canadian government. Formerly: Research Station Delhi (1994). Res: Tobacco, evening primrose, ginseng, peppermint, and other crops. Flue-cured tobacco studies include variety development; improved production, harvesting, and curing practices; and improved chemical, cultural, and biological pest control techniques. Alternative crop studies emphasize crops suitable on coarse-textured soils and include development of optimum agronomic practices, cultivar evaluation, and development of biological and chemical pest control methodologies. Also conducts research to determine the effects of soil and crop management practices on the chemical and physical parameters of coarse-textured soils and their relationship to crop yield and quality. Educ: Supervision of masters and doctoral students. Lib. Holdings: 6,000 Volumes. Subjects: Tobacco and agricultural science. Libn: R. Duff.

★24★ Agriculture and Agri-Food Canada -

Pest Management Research Centre, London

1391 Sandford St.

London, ON, Canada N5V 4T3 Dr. C.F. Marks, Dir.

Phone: (519)457-1470

Fax: (519)457-3997

Email: wpouserid@em.agr.ca

WWW: http://res.agr.ca/lond/pmrc.pmrchome.html

Fnd: 1951. Desc: Integral unit of Agriculture and Agri-Food Canada. Staff: 48 Research, 125 Other. Fin.Sup: Canadian government. Res: Develops alternative and environmentally acceptable technologies for the protection of tree fruits, vegetables, and field and ornamental crops from disease and insect pests; develops alternative crops and sustainable management practices for coarse-textured soils; preserves clonal germplasm; and determines the impacts of agricultural practices on soil and water quality. Reres: 25 hectare land base. Pubs: Annual Report.

★25★ Agriculture and Agri-Food Canada -Pest Management Research Centre, Vineland

4902 Victoria Ave. Box 6000

Vineland Station, ON, Canada LOR 2E0

Greg Poushinsky, Res.Mgr.

Phone: (905)562-4113 Fax: (905)562-4335

Email: poushinskyg@em.agr.ca

WWW: http://www.agr.ca/lond/pmrc/pmrchome.html

Fnd: 1911. Desc: Integral unit of Agriculture and Agri-Food Canada Research Branch, Staff: 20 Research, 13 Technical, 18 Other. Fin.Sup: Industry, Canadian government. Res: Conducts crop protection research applicable to tree fruits, grapes, small fruits, and ornamentals, emphasizing integrated pest management and biocontrol methods. Contributing scientific disciplines include: entomology, including studies on fruit pest management, acarology, toxicology, bioclimatology, and ornamentals entomology; chemistry, including studies on natural products chemistry, residue chemistry, biorationals chemistry, and chemical control; nematology including nematode ecology, host-parasite relations, and molecular methods of taxonomy; and plant pathology, including studies on fruit mycology, fruit and soil-borne viruses, grapevine bacteria and viruses, and ornamentals pathology. Pubs: Canada Agriculture (quarterly); Research Branch Report (annually). Educ: Fall research review meetings with industry and extension representatives (annually). Lib. Holdings: 11,000 Volumes. Subjects: Entomology, plant pathology, nematology, and ch emistry. Libn: S. Alder. Pers: Dr. John Potter.

★26★ Agriculture and Agri-Food Canada -Range Research Station, Kamioops 3015 Ord Rd.

Kamloops, BC, Canada V2B 8A9 Dr. Walter Majak, Mgr.

Phone: (250)554-5200

Fax: (250)554-5229

Fnd: 1962. Desc: Integral unit of Agriculture and Agri-Food Canada Research Branch, administered by Agriculture and Agri-Food Canada Research Centre, Lethbridge, Alberta. Staff: 4 Research, 2 Support, 6 Technical, 10 Other. Fin.Sup: Canadian government. AKA: Kamloops Range Research Station. Formerly: Dominion Range Experimental Station: Research Station Kamloops (1993). Res: Forage production and utilization in dry-belt interior British Columbia rangelands using native and seeded crops with the goal toward increased output of animal products from the cow-call industry. Subject areas include range man-

agement, cultivated crop management and ecology, soil science, toxic plants, bloat incidence in cattle diets of cattle grazing high altitude ranges, timothy and meadow foxtail grazing, timber milkvetch poisoning, quality of animal feed, fertilizer requirements of forages, plant physiology, and persistence, quality, and vield of perennial and intercropped annual forage crops. The Station also studies the interrelationships of cattle and trees. Lib: Reference Collection. Subjects: Covers range, soil, animal, and plant sciences.

★27★ Agriculture and Agri-Food Canada -Research Centre, Brandon

PO Box 1000 A, RR 3

Brandon, MB, Canada R7A 5Y3 Dr. Reg Kucey, Dir.

Phone: (204)726-7650

Fax: (204)728-3858

Email: info@mbrsbr.agr.ca

Fnd: 1886. Desc: Integral unit of Agriculture and Agri-Food Canada Research Branch, but with its own board of control. Staff: 6 Support, 4 Administrative, 17 Technical, 36 Other. Fin.Sup: Industry, Canadian government. Res: Animal science studies focus on beef cattle breeding and reproductive physiology as well as swine genetics, reproductive physiology, nutrition, and meat physiology. Plant and soil science studies include barley breeding, com breeding and agronomy, soil fertility and plant nutrition, herbicide physiology, soil management and conservation, pasture management, and forage agronomy, Rarca: 755 hectares and rents 443 hectares of plot and feed production land, 500 beef cows, and 150-sow swine unit. Pubs: Review of Results (annually); Newsnotes (monthly). Educ: Field days (annually), in summer. LIb: Reference Collection. Subjects: Crop and animal sciences. Libn: Carol Enns. Tech.Trans.Off: Sharon Ramsev.

★28★ Agriculture and Agri-Food Canada -Research Centre, Charlottetown

440 University Ave. PO Box 1210

Charlottetown, PE, Canada C1A 7M8

Dr. David R.C. Bailey, Dir.

Phone: (902)566-6816 Fax: (902)566-6821

Email: bailevd@em.agr.ca

WWW: http://res.agr.ca/charlotte

Fnd: 1909. Desc: Integral unit of Agriculture and Agri-Food Canada Research Branch, Ann.Res. Budget: C\$5,900,000. Ann.Rev: C\$526,000. Staff: 19 Research, 3 Support, 34 Technical, 18 Other. Fin.Sup: Industry, Canadian government. Res: Potatoes. livestock feed crops (forages, cereals, and protein crops), soil and water management. The Feed Crops Program develops new varieties of cereals, forages, and soybeans; develops improved production practices, including studies of control procedures for cereal diseases; breeds spring and winter wheat for quality and disease resistance; and conducts seed treatment and foliar fungicide programs. Forage research is directed toward identifying superior forage species and cultivars, breeding of clovers, developing improved management and conservation techniques, and evaluating feed crops in beef production. The Potato Program conducts research on improved production management systems for table and processing potatoes; new cultivar evaluation; control and spread of diseases that infect potatoes; weed control; development of systems of production for quality seed potatoes; integrated approaches for managing insect pests in potatoes; and development of soil management including minimum tilage, to reduce energy use and soil erosion; and evaluates the relationship between agronomic practices and water quality. Rerce: Three research farms, various greenhouses, growth chambers and laboratories. Lib: Reference Collection. Holdings: 3,000 Volumes. Subjects: Agriculture, plant and soil science. Libn: Barrie Stanfield. Info.Off: Wayne Riley.

★29★ Agriculture and Agri-Food Canada -Research Centre, Fredericton

PO Box 20280

Fredericton, NB, Canada E3B 4Z7

Dr. Gilles Saindon, Dir.

Phone: (506)452-3260 Fax: (506)452-3316

Fnd: 1912. Desc: Integral unit of Agriculture and Agri-Food Canada Research Branch, Staff: 15 Research. 21 Technical, 26 Other. Fin.Sup: Canadian government. Res: Develops new cultivars and technologies for the production, handling, and management of potatoes. Also conducts research on soil management and conservation. Rsrcs: National repository of potato gene sources. Lib. Holdings: 30,000 Volumes. Libn: Richard Anderson.

★30★ Agriculture and Agri-Food Canada -Research Centre, Lacombe

6000 C and E Trail

Lacombe, AB, Canada T4L 1W1 Dr. P.D. Lidster, Dir. Phone: (403)782-8100 F

Fax: (403)782-6120 Email: lidsterp@em.agr.ca

WWW: http://res.agr.ca/lacombe/welcome.htm

Fnd: 1907. Desc: Integral unit of Agriculture and Agri-Food Canada Research Branch, Staff: 18 Research, 20 Technical, 37 Other. Fin.Sup: Industry, Canadian government. Res: Integrates production, processing, and consumer acceptance of red meats (primarily beef and pork). Live animal work concentrates on production of meat, transportation of meat, and animal welfare. Also evaluates the effects of post-mortem technologies on meat quality, palatibility, and consumer acceptance; develops carcass grading methodologies; studies meat spoilage and safety from fabrication through the transportation system to the retail case; develops packaging technologies and specialized industrial equipment; researches forage, soil and weeds, plant pathology; and oat, barley and canola breeding; and addresses problems in the Parkland area of Alberta and the Peace River region. Databases: Beef and swine production, ante-mortem and post-mortem technologies, carcass grading, meat spoilage and safety, modeling, forage, weeds, soil, and oats. Maintains 808 hectares of cropland at Lacombe, Alberta, 250 beef cow herd, abattoir, consumer evaluation facility, laboratories, field plots, greenhouses, plant growth chambers, and a weather monitoring station. Pubs: Directory of Research. Srvcs: Facility Tours, on request. Lib. Holdings: 1,100 Books, 60 Journals, 1,500 Periodicals. Subjects: Plants and animals. Libn: Shelley Pirnak; Email: library-hacombe@em.agr.ca. Info.Off: Dr. E.A. de St Remy.

★31★ Agriculture and Agri-Food Canada -Research Centre, Lethbridge

Lethbridge, AB, Canada T1J 4B1 Dr. Steve Morgan Jones, Dir.

Phone: (403)327-4561 Fax: (403)382-3156

Email: morganjoness@em.agr.ca

WWW: http://res.agr.ca/leth/homepage/lethweb/

Fnd: 1906. Desc: Integral unit of Agriculture and Agri-Food Canada Research Branch. Ann.Res. Budget: C\$21,000,000. Ann.Rev: C\$8,000,000. Staff: 24 Administrative, 70 Scientific, 84 Technical, 82 Other, 5 Visiting Academic, 15 Graduate. Fin.Sup: Industry, Canadian government, provincial government. Res: Develops crop varieties and crop and livestock production and protection methods suited to the western Canadian prairies. Develops sustainable grazing management systems for the interior of British Columbia. Inventory soil resources and degradation in the province of Alberta. Approximately 60 research projects are conducted by scientists in three disciplinary sections. The Land Resource Science Section conducts research in soil and water conservation and productivity, including plant nutrition, conservation tillage, agrometeorology, dryland agronomy, hydrology, organic chemistry, rhizosphere ecology, soil fertility, biochemistry, physics, remote sensing, and economics. The Crop Science Section develops new varieties of

wheat, potatoes, forages, pulse crops, and safflower and conducts related research in genetics, plant physiology, crop diseases, insect and weed control. and breeding methods. Specific interests include crop physiology, tissue culture, molecular genetics, cutworms, grasshoppers, insect pathogens, beneficial insects, chemical and biological weed control, range ecology, and diseases of cereals, forages, potatoes, oilseeds, and pulse crops. The Livestock Sciences Section conducts research in the areas of reproductive physiology, animal nutrition, animal physiology, economics, rumen microbiology of dairy and beef cattle and sheep, and addresses problems related to pests and parasites of livestock, including studies in cattle grub ecology, immunology, parasitology, research harmacology, serology, biological control, toxicology. Rsrcs: Large phytotron, vivarium, a controlled environment barn, electron microscopes, image analysis facility, mass spectrometer, historical dryland and notill rotations, and four substations. Educ: Seminars (weekly); Guided tours for special interest groups. Mtgs: Conferences. Srvcs: Open House (annually); Dissemination of available federal agricultural bulletins. Lib. Holdings: 17,500 Volumes. Subjects: Agricultural sciences. Libn: C. Ronning Mains; Email: roningmains@em.agr.ca. Info.Off: R.W. McMullin.

★32★ Agriculture and Agri-Food Canada -Research Centre, St. John's

PO Box 37

308 Brookfield Rd.

Mt. Pearl, NF, Canada A1N 2C1 Dr. John E. Richards, Dir.

Phone: (709)772-4619 Fax: (709)772-6064

Email: richardsi@em.agr.ca WWW: http://res.agr.ca/stjohns

Fnd: 1950. Desc: Integral unit of Agriculture and Agri-Food Canada Research Branch. Ann.Res. Budget: C\$1,600,000. Staff: 7 Research. 7 Technical. 17 Other. Fin.Sup: Canadian government. Res: Agronomy, horticulture, plant breeding, agricultural engineering, and entomology. Research is directed toward clubroot disease of rutabaga, plant nutrition, vegetable and forage adaptation trials, integrated pest management, and management of native lowbush blueberry. Emphasis is placed on increasing vegetable and forage production, developing efficient drainage and cultivation techniques, designing and adapting mechanical equipment, management of peat soil crops, and integrated pest management. Pubs: Research Branch Report (annually). Lib. Holdings: 500 Monographs. Subjects: Entomology, plant and soil science. lant breeding and pathology. Info.Off: Ms. Christine . Wheaton.

★33★ Agriculture and Agri-Food Canada -Research Farm, Kapuskasing

PO Box 160

Kapuskasing, ON, Canada P5N 2Y3 Dr. Gabriel L. Roy, Supt.

Phone: (705)335-6148

Email: roygl@em.agr.ca

Fax: (705)337-6000

Fnd: 1917. Desc: Research branch of Agriculture and Agri-Food Canada. Ann.Res. Budget: C\$850,000. Ann.Rev: C\$85,000. Staff: 3 Research, 7 Support, 2 Administrative, 2 Technical. Fin.Sup: Canadian government. Res: Beef cattle production, silage quality and preservatives, and forage crops. Studies are aimed at increasing efficiency of primary beef production by developing beef cattle management systems: increasing yield, quality, and persistance of forage crops. Rarca: Small laboratory with spectrophotometer, centrifuge, proximate analysis, microbiological counting, typing, and toluene distillation equipments. Pubs: Bulletins; Research Highlights. LIb: Reference Collection. Subjects: Forages, silages, and beef cattle. Pers: C. Lafreniére; R. Berthiaume.

★34★ Agriculture and Agri-Food Canada -Research Farm, Nappan

Nappan, NS, Canada BOL 1C0 R.S. Bush, Supt.

Phone: (902)667-3826 Fax: (902)667-2361

Email: bushr@em.agr.ca

Fnd: 1886. Desc: Integral unit of Agriculture and Agri-Food Canada. Staff: 5 Research, 5 Technical, 17 Other, Fin.Sup: Canadian government, Res: Beef cattle, reproduction, forage, and soils. Pubs: Newsletter (3/vear).

★35★ Agriculture and Agri-Food Canada -Research Farm, Normandin

1468 St-Cyrille St.

Normandin, PQ, Canada G8M 4K3

Angele St. Yves, Dir.

Phone: (418)274-3378 Fax: (418)274-3386

Email: tremblaygf@em.agr.ca

Desc: Research branch of Agriculture and Agri-Food Canada, Staff: 4 Scientific, 4 Technical, 6 Support. Fin.Sup: Canadian government. Res: Plant production, particularly crop husbandry, testing and management of forage and cereals, including forage conservation and utilization. Libn: Suzanne Cote; Email: cotes@em.agr.ca.

★36★ Agriculture and Agri-Food Canada -Research Station, Melfort

Box 1240

Melfort, SK, Canada S0E 1A0

K.J. Kirkland, Mgr.

Phone: (306)752-2776 Fax: (306)752-4911

Email: em372mail@em.agr.ca

Fnd: 1935, Desc: Integral unit of Agriculture and Agri-Food Canada Research Branch. Staff: 6 Research, 6 Technical, 10 Other. Fin.Sup: Industry, Canadian government, provincial government. Res: Production systems for adapted cereal, oilseed, forage and pulse crops are developed by a multi-disciplinary research team of agronomy, soil management, plant nutrition, weed and disease management. Effects on long-term productivity of rotation, tillage, grazing, and crop management practices on both high and low organic matter soil distinguishes this research emphasis. Crop management to reduce dependence on chemical inputs is being developed through use of integrated pest management practices and effective crop sequences. Adapted crop varieties are selected for northern environments. Pubs: Research Highlights (annually), Lib: Reference Collection, Subjects: Soils, crops, and livestock.

★37★ Agriculture and Agri-Food Canada -Research Station, Ste. Foy

2560 Hochelaga Blvd. Ste. Foy, PQ, Canada G1V 2J3

Angele St. Yves, Dir.

Phone: (418)657-7980 Fax: (418)648-7231

Email: st.yves@qcrssf.agr.ca

Fnd: 1967. Desc: Integral unit of Agriculture and Agri-Food Canada Research Branch, affiliated with Laval University. Staff: 29 Research, 3 Support, 20 Technical, 42 Other. AKA: Soils and Crops Research and Development Centre. Res: Forage crops, cereals, and natural resources (soil, water, and air), including physiology and biochemistry of cold resistance, breeding, pathology, crop management, genetic engineering, soil conservation, soil chemistry and physics, sustainable agriculture, and nitrogen fixation. Rercs: More than 300 hectares of land on three experimental farms, and is located in a scientific research and development enclave, which consists of a forestry research center, an industrial research center; a national institute of scientific research (INRS), a national scientific complex, and Laval University. Pubs: Extension publications; Annual Research Report. Educ: Seminar (biweeldy). Lib. Holdings: 6,000 Volumes, 20,000 Periodicals. Tech.Trans.Off: Michel Germain, Agronomist.

★38★ Agriculture and Agri-Food Canada -Semiarid Prairie Agricultural Research Centre PO Box 1030

Swift Current, SK, Canada S9H 3X2

Dr. Wayne Lindwall, Dir.

Fax: (306)773-9123

Phone: (306)778-7200 Email: sparc@em.agr.ca

WWW: http://www.res.agr.ca/swift/welcome.htm Fnd: 1920. Desc: Integral unit of Agriculture and Agri-

Food Canada Research Branch. Ann.Res. Budget: C\$6,500,000. Ann.Rev: C\$500,000. Staff: 25 Research, 40 Technical, 53 Other. Fin.Sup: Industry, Canadian government, contracts. Formerty: Research Station, Swift Current (1995). Res: Plant breeding (cereal grains and grasses); plant physiology; management of cereals, grasses, and legumes; water, climate, and salinity; soil management and conservation; minimum and zero tillage cropping systems; range and pasture management; equipment design; and pedigreed seed increase. Rarca: Laboratories equipped for studies in chemistry, biochemistry, microbiology, physics, salinity, machine design, seed ncrease, and maintenance. Pubs: Research Branch Directory Report (annually); Research Newsletters. Educ: Field days, tours, and seminars. Lib. Holdings: 12,000 Volumes, Libn: K.E. Wilton, Info.Off: Joan Weisgerber.

★39★ Agriculture and Agri-Food Canada -Senator Herve J. Michaud Research Farm (Ferme De Recherche Senateur Herve J. Michaud)

PO Box 667

Bouctouche, NB, Canada E0A 1G0

Manon Proub, Prog.Ldr.

Phone: (506)743-2464 Fax: (506)743-8316

End: 1978 Desc: Substation of Agriculture and Agri-Food Canada Atlantic Food and Horticulture Research Centre, Staff: 3 Research, 2 Technical, 5 Other, Fin.Sup: Canadian government. Res: Vegetables, including studies on sustainable agriculture, seeding density, cultivars, and integrated pest management, with emphasis on increasing vegetable production and matering maturity; berries, including studies on mulches, assimilate allocation, photosynthesis and morphology; tree fruit, especially management and viability of winter-hardy apple rootstock and cultivar combinations for eastern New Brunswick.

★40★ Agriculture and Agri-Food Canada -Western Region Research Branch

930 Carling Ave. Ottawa, ON, Canada K1A 0C5

Dr. D.G. Dorrell, Dir.Gen.

Phone: (613)759-7865

Email: dorrelig@agr.ca

Fax: (613)759-7770

Fnd: 1978. Desc: Integral management unit of Agriculture and Agri-Food Canada Research Branch. Ann.Res. Budget: C\$82,596,700. Staff: 2 Research, 2 Other. Fin.Sup: Industry, Canadian government Res: Directs and manages general budgets and research programs at 7 research stations and 7 experimental farms in Manitoba, Saskatchewan, Alberta, and British Columbia. Basic and applied research activities in plant breeding (cereals, forages, field crops, and horticultural crops), entomology, plant pathology, agronomy, soil science, nutrition, cytogenetics, weed science, chemistry, biological control of plant and insect pests, biotechnology, virology, animal physiology, and nutrition are conducted. In addition, postproduction value added research in food storage food processing, food engineering, meat sensory evaluation and food safety is priority supported. Holistic food production systems are developed to environmental and economical sustainability criteria.

★41★ Alabama Agricultural and Mechanical University - Winfred Thomas Agriculture Research Station

372 Walker Lane

Hazel Green, AL 35750-0285 Hosea Nall, Dir.

Phone: (205)828-0270

Fax: (205)828-2109

Email: pgreene@asnaam.aamu.edu WWW: http://www.aomu.edu

Fnd: 1989. Desc: Integral unit of School of Agriculture, Alabama Agricultural and Mechanical University. Fin.Sup: Parent institution. Res: Agricultural research.

Rarca: 908 acres of farm land.

★42★ Alabama Agriculture and Industries

1445 Federal Dr.

Montgomery, AL 36107-1100

Jack Thompson, Comm. Phone: (334)240-7171

Fax: (334)240-7193 Res: Agricultural and industrial issues in Alabama.

★43★ Alabama Agriculture and Industries Department - Pesticide Laboratory

PO Box 370

Auburn, AL 36831-0370 Danny Lecompte, Dir.

Phone: (334)844-4705

Desc: Integral unit of Alabama Agriculture and Industries Department. Res: Pesticides.

★44★ Alabama Agriculture and Industries Department - Veterinary Diagnostic Laboratory

PO Box 2209 Auburn, AL 36831-2209 Fred Hoerr, Dir.

Phone: (334)844-4987

Desc: Integral unit of of Alabama Agriculture and Industries Department. Res: Veterinary diagnostics.

★45★ Alaska Fish and Game Department

Capital Office Park PO Box 25526 Juneau. AK 99802-5526 Frank Rue, Commissioner

Phone: (907)465-4100 Fax: (907)465-2332

TTY: 800-478-3648

Email: marlat Ofishgame.state.ak.us WWW: http://www.state.ak.us/local/akpages/

FISH.GAME/adfghome.htm

Desc: Integral unit of state government of Alaska. Res: Fish and game.

★46★ Alaska Natural Resources Department -Agriculture Division

1800 Glenn Hwy., Ste. 12 PO Box 949

Palmer, AK 99645-0949 Jay Kertulla, Dir.

Phone: (907)745-7200 Fax: (907)745-7112

WWW: http://www.dnr.state.ak.us/

Desc: Integral unit of Alaska Natural Resources Department. Res: Agriculture.

★47★ Alberta Agriculture - Plant Industry Division - Crop Diversification Centre-South

S.S. No. 4 Brooks, AB, Canada T1R 1E6

Thomas R. Krahn, Dir.

Phone: (403)362-1300 Fax: (403)362-1306 Email: krahn@agric.gov.ab.ca

Fnd: 1935. Desc: Integral unit of Plant Industry Division, Alberta Agriculture. Staff: 13 Research, 1 Support, 13 Technical, 15 Other. Res: The Centre is organized into three research sections. The Horticultural Crop Production Section studies vegetable and market garden crops, table and processing potatoes, fruit crops, greenhouse crops, and nursery and ornamental crops, emphasizing evaluation of new cultivars, development of production and management techniques suited to a short growing season, and winter hardiness evaluation. The Special Crops Production Section investigates grain corn, dry beans, other pulse crops, herbs, spices, essential oils, safflower, and