

Executive Summary

by Jolynne Tschetter,
Executive Director

I would like to thank the NDSURF Board and foundation staff for their efforts over the last year in helping the foundation move toward a more sustainable business model.

The working group that was established in FY18 to review the structure of the foundation met and made a recommendation to the NDSURF Board of Directors that the foundation continue with its current structure. At the same meeting, the Board voted to remove the Interim designation from my title.

Henry Nowak, Technology Licensing Manager, left NDSU and the foundation for the opportunity to lead technology transfer efforts at another land grant university. A search is currently underway to refill this position.

Research Fee and Royalty revenues for FY19 were \$1.13M. As in previous years the crops generating the most revenue for the foundation were wheat, potatoes, and edible beans. More detailed information about the varieties generating revenue for the foundation can be found on page 2 of this report.

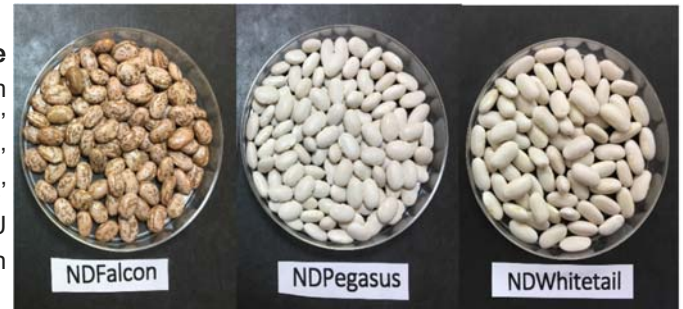
Current indications are that FY20 will see increased research fee and royalty revenue for the foundation but there is still uncertainty due to the current geo-political climate.

Jolynne R. Tschetter

FY19 at a Glance

Plant Sciences

Eleven new plant varieties were released in FY19. Three of them were edible beans, 'ND Whitetail' white kidney bean, 'ND Falcon' pinto bean, and 'ND Pegasus' great northern bean. The NDSU Edible Bean Breeder is Juan Osorno.



Horticulture

The FireFlare Orange® Mollis Azalea was released this year for licensing to wholesale nurseries. This selection was grown and outplanted in Fargo, ND in the early 1970's. The flowers are a very showy brilliant fire-orange. USDA hardiness zones 3b—8. A registered trademark issued in September 2019 for this cultivar.

Technologies:

Seventeen other disclosures came from various departments across campus including Chemistry and Biochemistry, Agricultural and Biosystems Engineering, Mechanical Engineering, Electrical and Computer Engineering, Coatings and Polymeric Materials, Microbiological Sciences, Pharmaceutical Sciences and Human Development and Family Science. Five patents were filed to protect selected technologies that were novel, non-obvious, and useful in that aspect that a company would potentially want to license it.



Patents and Trademarks

The NDSU Research Foundation was awarded eight issued patents in FY19, which included five U.S. patents, one European patent, and two South Korean patents. One Canadian registered trademark was granted for Spring Welcome® Magnolia

Joint Invention Highlight

The Energy & Environmental Research Center (EERC) and NDSU, working together on a Department of Energy (DOE) program, have a jointly shared invention on which a provisional patent was filed. This invention is a more efficient way to make ammonia, the single most energy-intensive chemical in the world. Over 1% of total annual worldwide energy consumption goes toward making ammonia. The new technology is centered on an electrochemical membrane comprising an EERC-developed proton-conducting material strategically composited by NDSU in a high-temperature polymer. The resulting membrane offers the potential to reduce ammonia production energy consumption, associated greenhouse gas emissions, and cost by 20%.

Revenue Generating Varieties

Barley

Conlon
ND Genesis
Pinnacle

Durum

Alkabo
Carpio
Divide
Joppa
Tioga

Edible Beans

Eclipse Black Bean
Lariat Pinto Bean
Maverick Pinto Bean
ND307 Pinto Bean
ND Palomino Pinto Bean
Rosie Light Red Kidney Bean
Stampede Pinto Bean
Talon Dark Red Kidney Bean

Oats

Austin Beach
Bond Boss
Brigalow Comet
Drover Empire
Flinders Jury
Lavish Rockford
Savannah Souris
Taipan

Potatoes

AC Peregrine Red
Dakota Crisp
Dakota Jewel
Dakota Pearl
Dakota Rose
Dakota Ruby
Dakota Russet
Dakota Trailblazer
NorDonna
NorValley

Rye

ND Dylan

Soybeans

Ashtabula
Blue Horizon
Cavalier
ND Benson
ND Bison
ND Henson
ND Stutsman
ND17009GT
Sheyenne
Traill

Wheat

Barlow
Elgin ND
Faller
Glenn
Mott
ND VitPro
ND901CL
Prosper
Velva

NDSU Research Foundation	
Statement of Revenues and Expenses	
July 1, 2018 - June 30, 2019	
	Jul '18 - Jun 19
Ordinary Income/Expense	
Income	
Foundation	
Research Fee/Royalty Payments	\$1,126,939
Other Operating Income	
PVP Cost Reimbursement	\$26,677
Other Interest Income	\$564
Patent Cost Reimbursement	\$54,542
License Fees	\$28,700
Other Revenue/Admin. Revenue	-\$76
Total Other Operating Income	\$110,407
Foundation Interest Income	\$3,626
Total Foundation	\$1,240,972
Endowment	
ADHM Endow Inc.	\$17
Math Endow Inc.	\$22
CSM Endow Inc.	\$11
NDSU/RF Endow Income	\$43,401
Spring Wheat Endowment	\$73,702
Durum Endowment	\$45,745
Total Endowment	\$162,898
Total Income	\$1,403,870
Gross Profit	\$1,403,870
Expense	
Reconciliation Discrepancies	\$0
Miscellaneous Expense	\$60
Legal & Related Expenses	
Collection Legal Fees	-\$547
Registering Fees	\$50
Trademark Expenses	\$767
Litigation Legal Fees	\$500
Patent Legal Fees	\$205,298
License Legal Fees	\$2,447
PVP Expenses	\$24,989
Total Legal & Related Expenses	\$233,503
Distributions	\$1,219,786
Administrative Expenses	\$215,020
Total Expense	\$1,668,369
Net Ordinary Income	-\$264,499
Other Income/Expense	
Other Income	
Net Gain/Loss on Investments	
2D Endow Gain/Loss	\$172,152
2W Endow Gain/Loss	\$295,758
BSBT STL SUB Corp Bond Gain/Los	\$2,822
BSBT Common Stock Gain/Loss	-\$1,348
BSBT Fixed Gain/Loss	\$18,512
BSBT Mutual Fund Gain/Loss	\$25,960
Vanguard Gain/Loss	\$51,391
Total Net Gain/Loss on Investments	\$565,247
Total Other Income	\$565,247
Other Expense	
Deprec Exp - Office Equipment	\$881
Total Other Expense	\$881
Net Other Income	\$564,366
Net Income	\$299,867

NDSU Research Foundation
Statement of Assets and Net Assets

June 30, 2019

ASSETS		Market Value
Current Assets		
Checking State Bank	\$94,807	
Fund 81294	\$4,278	
Other Savings	\$403,358	
Total Prepaid Expenses	\$8,540	
Total Current Assets		\$510,982
Fixed Assets		
Office Equipment	\$19,340	
Accum Depr - Office Equipment	-\$19,340	
Total Fixed Assets		\$0
Other Assets		
Plant Sciences Endowment		
Hard Red Spring Wheat Endowment	\$3,778,563	
Durum Endowment	\$2,253,651	
Total Plant Sciences Endowments		\$6,032,213
NDSU/RF Endowment		
RBC Wealth Management Money Marke Bell Bank	\$351,547	
BSBT STL SUB Money Marke	\$11,065	
BSBT STL SUB Corporate Bo	\$302,346	
BSBT Common Stock	\$265,510	
BSBT Fixed Income	\$516,040	
BSBT Money Market	\$19,982	
BSBT Mutual Fund	\$302,443	
Vanguard-S&P 500 Fund	\$688,641	
Total NDSURF Endowment		\$2,457,574
ADHM Endow		\$4,110
Math Endow		\$3,968
College of Science & Math Endowment		\$1,929
Total Other Assets		\$8,499,795
TOTAL ASSETS		\$9,010,777
LIABILITIES & EQUITY		
Current Liabilities		
Accounts Payable	\$9,511	
Accrued Payroll Expense	\$368	
Total Current Liabilities		\$9,879
Total Liabilities		
Equity		
Designated for Plant Science		
Hard Red Spring Wheat Endowment	\$3,778,563	
Durum Endowment	\$2,253,651	
Total Designated for Plant Science		\$6,032,213
Designated for NDSURF Endowment		\$2,457,574
Designated for ADHM		\$4,110
Designated for Math		\$3,968
Designated for Science & Math		\$1,929
Research Foundation		\$500,255
Retained Earnings		-\$299,018
Net Income		\$299,867
Total Equity		\$9,000,898
TOTAL LIABILITIES & EQUITY		\$9,010,777
Net Assets at Beginning of Year		\$8,758,633
Net Assets at End of Year		\$9,070,777
Change in Net Assets		\$312,144

Horticultural Varieties
Contributing to Income
in FY19

Copper Delight™
Juniper

Dakota Goldcharm®
Spirea

Dakota Goldrush®
Potentilla

Dakota Sunspot®
Potentilla

Prairie Gem®
Flowering Pear

Prairie Spire®
Green Ash

Dakota Pinnacle®
Asian White Birch

Blueberry Delight®
Juniper

Copper Curls®
Pekin Lilac

Northern Acclaim®
Thornless Honey-locust

Prairie Dream®
Paper Birch

Prairie Horizon®
Manchurian Alder

Prairie Statesman®
Swiss Stone Pine

Prairie Expedition®
American Elm

Prairie Stature®
Hybrid Oak

Prairie Reflection®
Laurel Willow

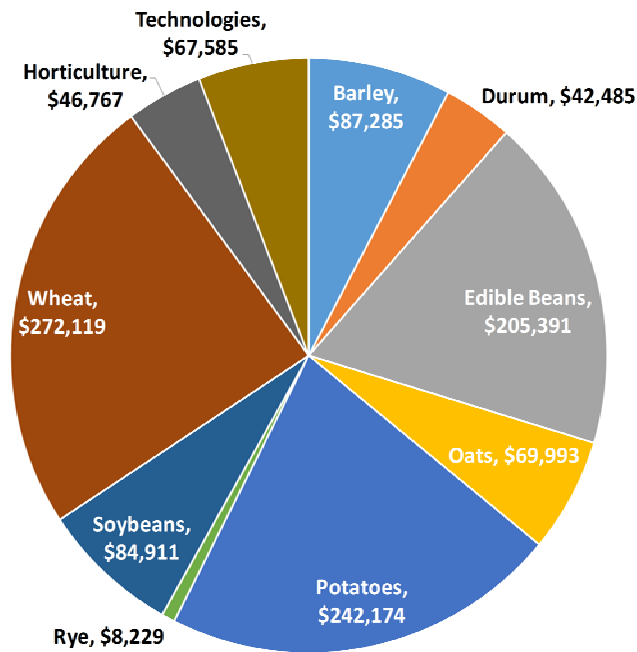
Northern Tribute®
River Birch

Royal Splendor®
Norway Spruce

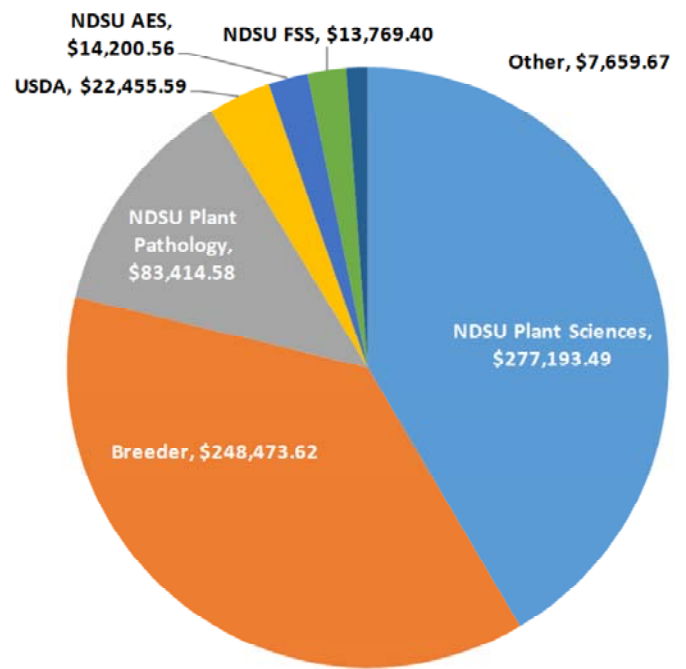
Northern Flare®
Sugar Maple

Northern Herald®
Eastern Redbud

FY19 Royalty/Fee Income



FY19 Distribution of Ag Fees



FY19 Distribution of Research Fees

FY19 research fees and license revenues were distributed to the following entities:

Distribution Activity	Barley	Durum	Edible Beans	Horticulture	Oats	Potato	Soybean	Technology	Wheat	Grand Total
BASF									42	42
ND Barley Council	2,094									2,094
ND Soybean Council							3,934			3,934
NDSU Ag. Experiment Station	1,594	1,035	4,566		776		177		6,052	14,201
NDSU Carrington Research Extension Center			134							134
NDSU Coatings & Polymeric Materials Dept.								4,753		4,753
NDSU College of Engineering								4,527		4,527
NDSU College of Science & Mathematics								5,602		5,602
NDSU Dept. of Chemistry								14,702		14,702
NDSU Electrical & Computer Eng								1,132		1,132
NDSU Entomology Department									9	9
NDSU Foundation Seedstocks	1,181	1,035	2,449		776		2,276		6,052	13,769
NDSU Industrial & Mfg Eng								3,395		3,395
NDSU Langdon Res. Ext Center						1,447				1,447
NDSU Physics Dept								4,810		4,810
NDSU Plant Pathology Department	4,814	1,035	10,415			48,473	4,565		14,114	83,415
NDSU Plant Sciences Department	32,206	14,146	46,407	20,976	22,500	64,336	51,858		24,764	277,193
NDSU Soil Science Dept.							2,276			2,276
NDSU VP RCA								7,922		7,922
USDA			22,456							22,456
Breeder	16,140	10,625	49,178	7,950	17,618	50,576			73,129	225,217
Inventor								23,257		23,257
Grand Total	58,029	27,877	135,606	28,926	41,671	164,831	65,084	70,100	124,162	716,286