

#### WILLARD WAUGH & SONS



Location: North Bedeque, PEI

Crop Advisor: Steve Watts, Genesis Crop Systems Inc.

Farm: 700 acres of potatoes
4R Demo Plot: Russet Burbank

#### Demo Site:

This site features a comparison between the growers standard program and one featuring reduced P<sub>2</sub>O<sub>5</sub>, split N applications and KCI replaced in the planter blend with K<sub>2</sub>SO<sub>4</sub>.

## Cropping system objective:

Produce nutritious, abundant and affordable food while making sound decisions to improve the economics of the farm and ensure environmental responsibility.

### What Gordon says about the 4Rs:

"On our farm, we want to ensure profitability and see improved return on investments while taking into account the health of our soils. The 4R framework is able to provide us with a system for making that happen while demonstrating that our farm operation is sustainable."



#### **BRIAN ANNEAR**



Location: Brudenell, PEI

Crop Advisor: Steve Watts, Genesis Crop Systems Inc.

Farm: 750 acres of potatoes

4R Demo Plot: Shepody

#### Demo Site:

Local research conducted on Shepody indicates that it requires less P<sub>2</sub>O<sub>5</sub> than many other varieties. This trial compares the growers standard program with a program using less P<sub>2</sub>O<sub>5</sub> and altered rates of other nutrients. KCI in planter blend is replaced with K<sub>2</sub>SO<sub>4</sub>.

## Cropping system objective:

Make cropping system decisions that result in higher nutrient use efficiency to ensure a profitable and sustainable farm for future generations.

## What Brian says about the 4Rs:

"Our farm believes strongly that the proper use of fertilizer is not only vital to our operation, but also economical and environmentally friendly to Prince Edward Island's natural resources."



#### JONATHAN MACLENNAN



Location: West Cape, PEI Crop Advisor: Steve Watts, Genesis Crop Systems Inc. Farm: 650 acres of potatoes 4R Demo Plot: Shepody

#### Demo Site:

Local research conducted on Shepody indicate that it requires less P<sub>2</sub>O<sub>5</sub> than many other varieties. This trial will compare the growers standard program with a program using less P<sub>2</sub>O<sub>5</sub> and altered rates of other nutrients. KCI in planter blend is replaced with K<sub>2</sub>SO<sub>4</sub>.

### Cropping system objective:

Growing the best quality crop to maximize profits while taking into account environmental concerns.

#### What Jonathan says about the 4Rs:

"Economic, social and environmental considerations have always been important on our farm, but by having a structured program like 4R Nutrient Stewardship, we are able to showcase our sustainability program and improve on our practices."



### **KEVIN HUNTER**



Location: Irishtown Rd, PEI

Crop Advisor: Steve Watts, Genesis Crop Systems Inc.

Farm: 1,000 acres of potatoes 4R Demo Plot: Ranger Russet

#### Demo Site:

This site features a comparison between the growers standard program and one featuring reduced amount of P<sub>2</sub>O<sub>5</sub> and K<sub>2</sub>O. KCI in planter blend is replaced with K<sub>2</sub>SO<sub>4</sub>.

## Cropping system objective:

At Hunter Farms we focus on using fertilizer more effectively and efficiently which translates into getting more value for every dollar spent and reducing negative off farm impacts at the same time.

#### What Kevin says about the 4Rs:

"4R Nutrient Stewardship is based on the principle of adaptive management and continuous improvement. From year to year, we can assess what we've done and make incremental changes in our farming practices to ensure fertilizer is used more effectively."



#### **SHAWN & COREY BIRCH**



Location: Lower Bedeque, PEI Crop Advisor: Steve Watts, Genesis Crop Systems Inc. Farm: 880 acres of potatoes 4R Demo Plot: Russet Burbank

#### Demo Site:

This site features a comparison between the growers standard program and one featuring reduced P<sub>2</sub>O<sub>5</sub>, split N applications and KCI replaced in the planter blend with K<sub>2</sub>SO<sub>4</sub>.

### Cropping system objective:

Increase farm profitability while remaining good stewards of the family's land to maintain its value for generations well into the future.

#### What Shawn & Corey say about the 4Rs:

"4R Nutrient Stewardship is a win, win situation for farmers, consumers and the environment. Everyone benefits when we can make sure our inputs, such as fertilizer, stay where they are placed."

## FARM DEMO PROFILE

## 4R Nutrient Stewardship Demo Field Trials:

- Soil samples collected from grower standard practice and modified program areas in the field prior to planting, mid-season and following crop harvest
- One foliar tissue sample per treatment area in each field taken mid-late August
- Modified program crop hand harvested from each treatment prior to commercial harvest; samples submitted to Cavendish Farms central grading facility to calculate marketable/total crop yields and establish crop value on a per acre basis
- Tuber samples collected from each treatment submitted to PEIDAF Soils Lab to determine nutrient content; subsequently, calculate crop nutrient removal on a per acre basis

