

## Glossary of Key Terms

| Term/Key Concept                 | Definition   | Crossword<br>(A: Across<br>D: Down) | Matching    | Word Search |
|----------------------------------|--|-------------------------------------|-------------|-------------|
| <b>4R Nutrient Stewardship</b>   | Helps farmers apply the right source of nutrients at the right rate, time and place on their fields  |                                     |             |             |
| <b>Agriculture</b>               | The science or practice of farming; cultivating the soil, producing crops or raising livestock   | D13                                 | X           | Yes         |
| <b>Bacteria</b>                  | Tiny living things that are found in almost all environments, including soil, water, organic matter and living bodies; most are harmless and many are beneficial   | A25                                 | R           | Yes         |
| <b>Best Management Practices</b> | The best way to do something; best management practices and technology enable us to grow more with less  |                                     | E           |             |
| <b>Billion</b>                   | 1 000 000 000  |                                     |             | Yes         |
| <b>Climate</b>                   | The usual weather conditions in a particular place or region   | D16                                 |             | Yes         |
| <b>Conserve</b>                  | To keep something safe from being damaged or destroyed   |                                     |             | Yes         |
| <b>Conservation Technologies</b> | Scientific or technical ways to sustainably use and protect natural resources in order to prevent loss or waste  | D3                                  | C           |             |
| <b>Conservation Tillage</b>      | Involves leaving at least 30% of the soil's surface covered with crop residues left after harvesting the previous crop; this helps slow water movement, reducing the risk of erosion, and increases soil organic matter, improving the soil's ability to hold moisture and grow better crops |                                     | H (tillage) |             |
| <b>Crops</b>                     | Plants that are grown by farmers, such as wheat, barley, peas, corn and canola   | D22                                 |             | Yes         |
| <b>Deplete</b>                   | To use most or all of something; to greatly reduce the amount of something   | D4                                  |             |             |
| <b>Economic</b>                  | Relating to the process or system by which goods and services are produced, sold and bought (associated with profits, jobs, incomes and community)   | D24                                 | O           | Yes         |
| <b>Education</b>                 | Refers to teaching or learning   |                                     |             | Yes         |
| <b>Efficient</b>                 | The ability to achieve desired results without wasting materials, time or energy   | A2                                  |             | Yes         |
| <b>Environment</b>               | The natural world (associated with soil health, habitats, water and greenhouse gas emissions)  | A28                                 |             | Yes         |
| <b>Fertilizer</b>                | Natural plant nutrients manufactured so farmers can provide the exact minerals crops need to grow, the primary nutrients being nitrogen, phosphorus and potassium  | D14                                 | W           |             |
| <b>Greenhouse Gas Emissions</b>  | The emission into Earth's atmosphere of various gases, especially carbon dioxide, that contributes to the warming of Earth's surface and the air above it  |                                     | G           |             |

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| <b>Global Positioning System (GPS)</b> | Navigational system using satellite signals; agricultural machinery is guided by GPS to precisely place nutrients, seed and crop protection products   |                                     |          |               |
| <b>Habitat</b>                         | The place where a plant or animal naturally lives  | A15                                 | L        | Yes           |
| <b>Healthcare</b>                      | Efforts to maintain or restore a person's health, especially by trained and licensed professionals; nurses and doctors work in this industry   | D17                                 | K        | Yes           |
| <b>Infrastructure</b>                  | The basic equipment and structures (such as roads and bridges) that are needed for a country, region or organization to function properly  | A23                                 | Q        | Yes           |
| <b>Innovation</b>                      | A new idea, practice or product  | A26                                 | S        |               |
| <b>Inputs</b>                          | Things that are put into a machine or system such as fuel, seed and fertilizer   | D12                                 |          | Yes           |
| <b>Irrigation</b>                      | The artificial application of water to the land or soil to assist plant growth   | D20                                 | U        | Yes           |
| <b>Investment</b>                      | An item that is purchased with the hope that it will generate income in the future   |                                     | B        | Yes           |
| <b>Limiting Factor</b>                 | A social, economic or environmental factor that is the least developed; a community is only as successful as the least developed factor so we must continually try to improve the weakest one  |                                     |          |               |
| <b>Malnourished</b>                    | A health condition resulting from not eating enough food or not eating enough healthy food   | A10                                 |          |               |
| <b>Market</b>                          | A place where products are bought and sold   | D10                                 |          |               |
| <b>Market Access</b>                   | The ability of a business owner (e.g., farmer) to sell his or her goods to other people or companies   |                                     | A        |               |
| <b>Native Species</b>                  | Plants or animals that naturally live in an area; for example, deer are a native species in Canada, zebras are not; we should be careful not to introduce non-native species to an area as they can become invasive, taking habitat and resources away from native species | A29                                 |          |               |
| <b>Nearly 10 Billion</b>               | Nearly 10 000 000 000 is the estimated world population by the year 2050   |                                     |          | Yes (Billion) |
| <b>Nutrients</b>                       | Humans consume plants and animals to obtain nourishment from these   | A7                                  | P        |               |
| <b>Organic</b>                         | Relating to living things; made without the use of artificial chemicals  |                                     |          |               |
| <b>Photosynthesis</b>                  | The process by which a plant turns water and carbon dioxide into food when the plant is exposed to sunlight  | D6                                  | N        |               |
| <b>Precise</b>                         | To be exact; to be accurate  |                                     |          | Yes           |
| <b>Protect</b>                         | To care for; to watch over   |                                     |          | Yes           |
| <b>Riparian Area</b>                   | A space between the land and the waterway ideally filled with native grass, bushes and trees   | D8                                  | F        |               |
| <b>Ripple Effect (short version)</b>   | The simple planting of a seed starts a chain of events that help the farmer, community and eventually the world  |                                     | D        |               |

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| <b>Ripple Effect (long version)</b> | Describes how greater crop yields feed the farm family and allow them to invest in farm supplies and best management practices, which can produce even more yield. When farmers prosper, their communities benefit through investments in education, medical care, infrastructure and environmental improvements. As economic, environmental and social factors improve in a community, more opportunities are created throughout the region, country and eventually the world. The ripple will need to go all around the world if we are to sustainably feed the population. |                                     | D        |             |
| <b>Profit</b>                       | Money remaining after all expenses have been paid   |                                     |          | Yes         |
| <b>Seed Varieties</b>               | Different kinds of the same type of seeds that can be planted to grow crops more successfully in different climates   | A21                                 | T        |             |
| <b>Social</b>                       | Relating to people or society in general; the welfare of human beings as members of society (associated with food, education, health and infrastructure)  | D11                                 | Y        | Yes         |
| <b>Soil</b>                         | The upper layer of the Earth that may be dug up or plowed, and in which plants grow   | A18                                 | M        | Yes         |
| <b>Stakeholder</b>                  | A person or group that has an interest or concern in an area; for example, a business's stakeholders would be customers, employees, investors and government; your parents, teachers and you are all stakeholders in your education   |                                     |          | Yes         |
| <b>Stewardship</b>                  | The management or care of something   |                                     |          | Yes         |
| <b>Sustainable</b>                  | Meeting the economic, social and environmental needs of the present without compromising the needs of the future  | A19                                 | J        | Yes         |
| <b>Sustainable Agriculture</b>      | Using best farming practices to grow the most food and fiber on the land for long term economic, social and environmental success   |                                     |          |             |
| <b>Techniques</b>                   | Ways of doing things by using special knowledge or skill  | D9                                  |          | Yes         |
| <b>Tillage</b>                      | The preparation of the land for growing crops; farmers use conservation tillage to minimize soil erosion and moisture loss  | A5                                  | H        | Yes         |
| <b>Watershed</b>                    | All of the land area that drains into the same body of water (e.g. river, lake or wetland), including areas such as parks, fields, schoolyards and even parking lots; watersheds know no political borders, whether national or international   |                                     |          | Yes         |
| <b>Wetlands</b>                     | These marshy bodies of water are the kidneys of the environmental wetlands, filtering excess nutrients and helping prevent or reduce floods   | A27                                 | I        |             |
| <b>Yield</b>                        | To produce or provide something; a measurement of the amount of a crop that was harvested per unit of land (e.g., if 3 grains are harvested for each grain planted, that is a 1:3 yield)  | D1                                  | V        | Yes         |