



Agrology: Balancing Agriculture and The Environment

2016 SIA Provincial AGM



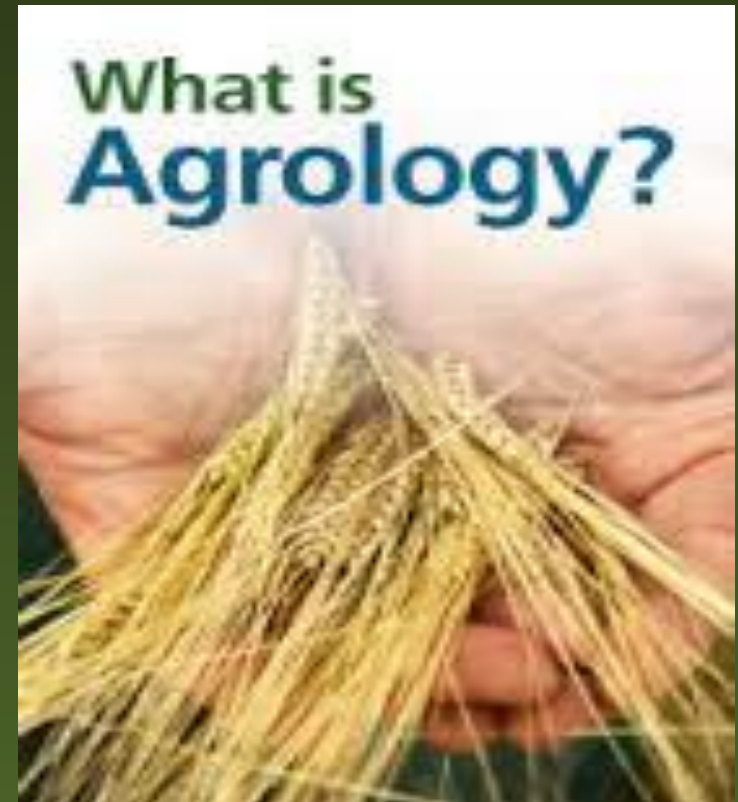
Presentation Outline

- Evolution of agrology
- Differences and similarities between the Agriculture and the Environmental sectors
- Future of agrology
- Change/Growth in the Environmental scope of agrology



Evolution of Agrology

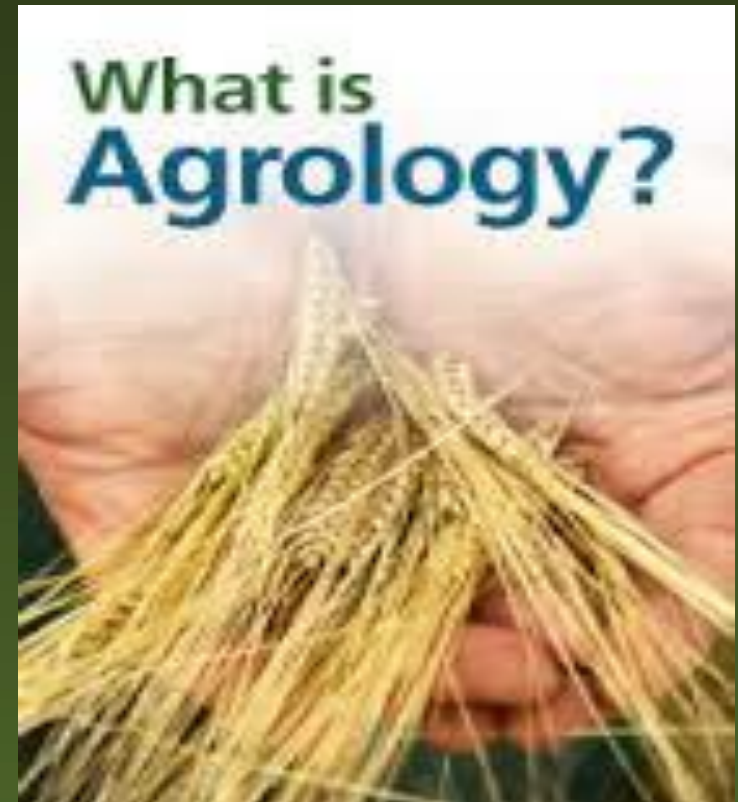
- Traditionally known as soil science dealing with the production of crops
- Definition has changed over time to suit the growing profession
- Term “agrologist” coined in 1946





Evolution of Agrology

- Now governed by 10 provincial regulators (including SIA)
- Estimated to have 10,000+ agrology professionals registered in Canada as of 2016 (in 2004 there were only 5000 registered)





Evolution of Agrology

- Rapid recognition of the profession across Canada
- Professional “sign off” requirements bringing the profession to the forefront of the environmental industry
- Demand for trained and competent regulated members is growing



Balancing Agriculture and the Environment

Now more than ever there needs to be a focus on the balance between agriculture and the environment as more stringent guidelines and policies are implemented

- Saskatchewan Environmental Code- Qualified Persons (QP)





Agriculture and the Environment: *Similarities*

- Agrologists must understand the land use and apply appropriate regulatory framework (e.g. Farmland vs. pasture or topsoil vs. subsoil)
- Both areas focus on utilizing soil science and testing to enhance crop yields and quality (landowner satisfaction)
- Both areas of practice focus on innovation and precision technology





Agriculture and the Environment: *Similarities*

- Environmental practices can help to enhance soil nutrients and productivity while focusing on safe disposal practices (LWD) allowing for synergies between the two industries
- 6 Soil functions – soils management extends beyond a two-tier Ag/Env focus within a profession





Agriculture and the Environment: *Similarities*

- Continuous involvement with ALL Stakeholders
- Site specific plans are developed with full input from landowners/producers/ranchers and occupants.





Agriculture and the Environment: Differences

- Difference in the practice is in the driving force
 - Agriculture sector highly focused on production, development, management, and marketing.
 - Environmental sector – the focus is to bring disturbed lands, surface water and ground water into compliance and back into productive capacity for agriculture and forestry.
 - Environmental sector - aims to document baseline conditions for future reclamation efforts and for ministerial permit clearances/approvals



Practice of Agrology

Plant Science Botanist	Soil and Terrain Classification	Animal and Poultry Science	Research & Extension Information	Nutritionist	Food and Fibre Processing	Resource Managers	Shellfish Biology & Aquaculture
Consultants	Horticulture	Waste Water Management	Integrated Resource Management	Genetics	Marketing	Academia	Waste Management
Resource Use Mediation	Primary Production	Policy Development, Implementation	Biological Control IPM	Policy Analyst	Land Use Management	Agroforestry	Riparian Area Remediation
Agricultural Engineering	Environmental Regulation	Arborist	Watershed Management	Forest Soil Fertility	Agroecology	Food Science	Aboriginal Affairs
Range Management	Habitat Restoration	Hydrology Hydrogeology	Terrain Stability Assessments	Apiculture	Agri Business Legal & Accounting	Resource Planning	Silviculture
Entomology	Pedology Geomorphology	Contaminated Site Remediation	Plant Pathology	Biotechnology	Soil Scientist GIS	Fish and Wildlife Habitat	Appraisals
Specializations will continue to be added		Environmental Impact Assessments	Groundwater Protection	Agrometeorology	Environmental Stewardship	Economist	Mine Reclamation



The Future of Agrology

- Environmental regulations are continuously changing
- Decisions on regulatory updates and revisions need to include input from the agricultural sector





The Future of Agrology

- With an increasing world population, food production is going to continue to be a critically important topic. We must remain vigilant to changes, and adapt to remain as the *Guardians of the Food System*





The Future of Agrology

- Technology and innovation will be key to long term success both in the agriculture and environmental sectors
- Precision based software, equipment and technologies will pave the way for better on-site practices and minimize impacts to land





The Future of Agrology

- Agrology regulating bodies will continue to enhance requirements for members to be in line with changing regulatory frameworks
- Further demands for professional sign off requirements are being discussed in other jurisdictions (e.g. Wetland Practitioners)



Change/Growth in the Environmental Practice Area

- Rationale for change
- Rationale for growth





Change/Growth in the Environmental Practice Area

- Industry expansion
- Professional diversification
- Balancing agricultural needs with industrial needs





Thank you