



AGGP-Agroforestry

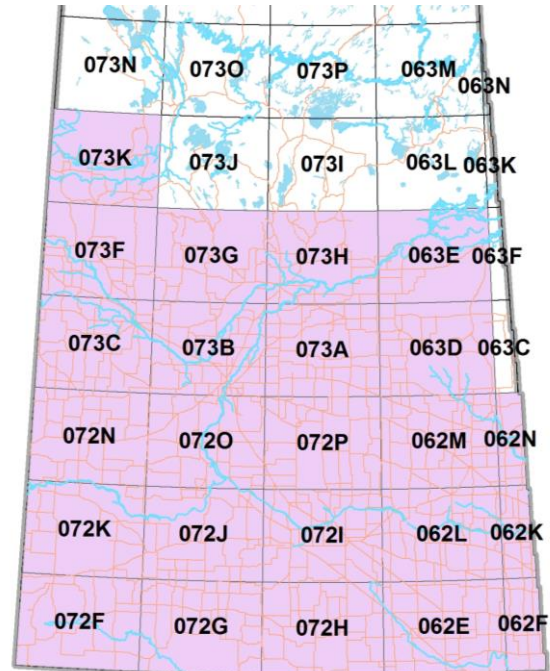
SASKATCHEWAN SHELTERBELT INVENTORY

No. SASK-32

by JOSEPH M PIWOWAR

From 1888 to 2014 the Indian Head Agroforestry Development Centre distributed over 600 million trees to farmers across the Prairie Provinces. While there are records of the numbers of trees shipped and their destinations, until now there has not been an accurate inventory of where these trees were planted and how many are still growing.

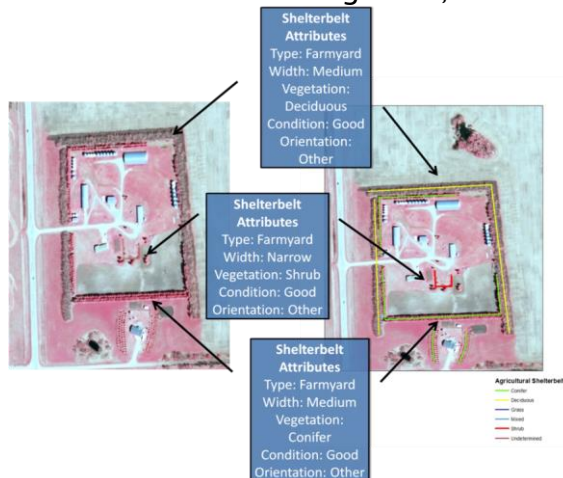
The Saskatchewan Shelterbelt Inventory was created by locating and identifying shelterbelts visible on digital airphotos obtained from the Saskatchewan Geospatial Imagery Collaborative (flysask.ca). The photos were acquired between 2007 - 2015 at a nominal ground resolution of 50 cm. Where possible, colour infrared (CIR) photos were used because of the enhanced distinction of vegetation in the near-infrared spectral region. True-colour photos were examined when the CIR photos were unclear and when supplemental detail was needed to validate feature identification. The inventory covers portions of 24 1:250,000 scale Canadian National Topographic (NTS) map sheets.



Coverage of the Saskatchewan Shelterbelt Inventory (labelled by NTS mapsheet).

Digitizing

As the shelterbelts were digitized, the following characteristics were recorded:



Digitized Shelterbelt Characteristics

TYPE

Field; Farmyard.

WIDTH

Narrow: single row; **Medium:** 2-3 rows; **Wide:** more than 3 rows.

COMPOSITION

Grass; Shrub; Deciduous; Coniferous; Mixed; Undetermined. Note that species could not be accurately identified from the photos.

CONDITION

Good: Highly intact; <20% gaps; **Fair:** Mainly intact; 20-50% gaps; **Poor:** Sections missing; >50% gaps.



Agriculture and Agri-Food Canada

Agriculture et Agroalimentaire Canada

UNIVERSITY OF SASKATCHEWAN
Centre for Northern Agroforestry and Afforestation

University of Regina

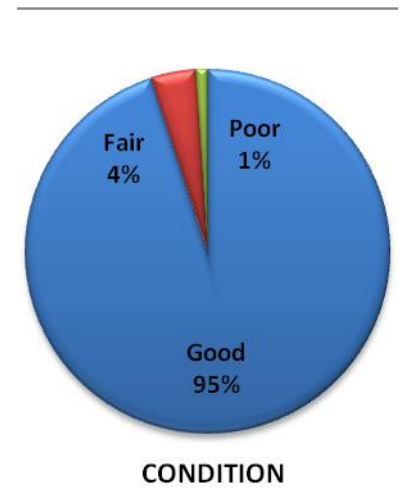
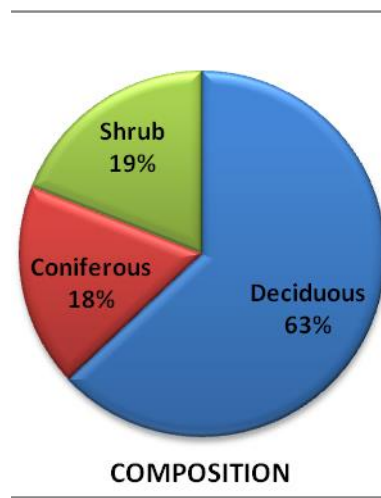
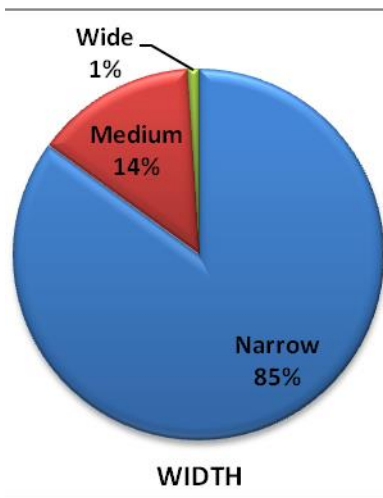




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SHELTERBELT STATISTICS

	FARMYARD	FIELD	TOTAL
NUMBER OF SHELTERBELTS	226,200	35,800	262,000
AVERAGE LENGTH	125 M	635 M	200 M
TOTAL LENGTH	28,350 KM	22,700 KM	51,000 KM



FURTHER READING

Amichev, B.Y., et al. 2015. Mapping and quantification of planted tree and shrub shelterbelts in Saskatchewan, Canada. *Agroforestry Systems* 89(1):49-65

AGGP Fact Sheet(s): SASK-1, SASK-4 through SASK-10

CONTACT FOR MORE INFORMATION: SASKAGROFORESTRY.CA/

ACKNOWLEDGEMENTS & COPYRIGHT

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