Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for filming. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of filming are checked below.

☐ Coloured covers / Couverture de couleur
☐ Covers damaged / Couverture endommagée
☐ Covers restored and/or laminated / Couverture restaurée et/ou pelliculée
☐ Cover title missing / Le titre de couverture manque
☐ Coloured maps / Cartes géographiques en couleur
☐ Coloured ink (i.e. other than blue or black) / Encre de couleur (i.e. autre que bleue ou noire)
☐ Coloured plates and/or illustrations / Planches et/ou illustrations en couleur
☐ Bound with other material / Relié avec d'autres documents
☐ Only edition available / Seule édition disponible
☐ Tight binding may cause shadows or distortion along interior margin / La reliure serrée peut causer de l'ombre ou de la distorsion le long de la marge intérieure.
☐ Blank leaves added during restorations may appear within the text. Whenever possible, these have been omitted from filming / Il se peut que certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été filmées.
☐ Additional comments / Commentaires supplémentaires:

This item is filmed at the reduction ratio checked below / Ce document est filmé au taux de réduction indiqué ci-dessous.

<table>
<thead>
<tr>
<th>10x</th>
<th>14x</th>
<th>18x</th>
<th>22x</th>
<th>26x</th>
<th>30x</th>
<th>12x</th>
<th>16x</th>
<th>20x</th>
<th>24x</th>
<th>28x</th>
<th>32x</th>
</tr>
</thead>
</table>

☐ 26x

L'institut a microfilmé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques ou qui peuvent exiger une modification dans la méthode normale de filmage sont indiqués ci-dessous.

☐ Coloured pages / Pages de couleur
☐ Pages damaged / Pages endommagées
☐ Pages restored and/or laminated / Pages restaurées et/ou pelliculées
☐ Pages discoloured, stained or foxed / Pages décolorées, tachetées ou piquées
☐ Pages detached / Pages détachées
☐ Showthrough / Transparence
☐ Quality of print varies / Qualité inégale de l'impression
☐ Includes supplementary material / Comprend du matériel supplémentaire

☐ Pages wholly or partially obscured by errata slips, tissues, etc., have been refilmed to ensure the best possible image / Les pages totalement ou partiellement obscurcies par un feuillet d'errata, une pelure, etc., ont été filmées à nouveau de façon à obtenir la meilleure image possible.

☐ Opposing pages with varying colouration or discolourations are filmed twice to ensure the best possible image / Les pages s'opposant ayant des colorations variables ou des décolorations sont filmées deux fois afin d'obtenir la meilleure image possible.
The copy filmed here has been reproduced thanks to the generosity of:

Library
Agriculture Canada

The images appearing here are the best quality possible considering the condition and legibility of the original copy and in keeping with the filming contract specifications.

Original copies in printed paper covers are filmed beginning with the front cover and ending on the last page with a printed or illustrated impression, or the back cover when appropriate. All other original copies are filmed beginning on the first page with a printed or illustrated impression, and ending on the last page with a printed or illustrated impression.

The last recorded frame on each microfiche shell contain the symbol —— (meaning “CONTINUED”), or the symbol ▽ (meaning “END”), whichever applies.

Maps, plates, charts, etc., may be filmed at different reduction ratios. Those too large to be entirely included in one exposure are filmed beginning in the upper left hand corner, left to right and top to bottom, as many frames as required. The following diagrams illustrate the method:

```
1 2 3
```

L'exemple filmé fut reproduit grâce à la générosité de:

Bibliothèque
Agriculture Canada

Les images suivantes ont été reproduites avec le plus grand soin, compte tenu de la condition et de la netteté de l'exemplaire filmé, et en conformité avec les conditions du contrat de filmage.

Les exemplaires originaux dont la couverture en papier est imprimée sont filmés en commençant par le premier plat et en terminant soit par le dernier plat qui comporte une empreinte d'impression ou d'illustration, soit par le second plat, selon le cas. Tous les autres exemplaires originaux sont filmés en commençant par le premier plat qui comporte une empreinte d'impression ou d'illustration et en terminant par le dernier plat qui comporte une telle empreinte.

Un des symboles suivants apparaîtra sur la dernière image de chaque microfiche, selon le cas: le symbole —— signifie "A SUIVRE", le symbole ▽ signifie "FIN".

Les cartes, planches, tableaux, etc., peuvent être filmés à des taux de réduction différents. Lorsque le document est trop grand pour être reproduit en un seul cliché, il est filmé à partir de l'angle supérieur gauche, de gauche à droite, et de haut en bas, en prenant le nombre d'images nécessaire. Les diagrammes suivants illustrent la méthode.

```
1 2 3
4 5 6
```
PROVINCE OF BRITISH COLUMBIA.

DEPARTMENT OF AGRICULTURE (LIVE STOCK BRANCH).

Noxious Weeds, their Identification and Eradication.

By H. O. English, Soil and Crop Instructor.

The following are the weeds classified as noxious under the "Noxious Weed Act" (chapter 69, 1915) of the Province of British Columbia:

- Canada thistle.
- Perennial sow-thistle.
- Annual sow-thistle.
- Bull-thistle.
- Russian thistle.
- Oxy-eye daisy.
- Wild mustard or charlock.

These may be classified according to the length of time they live, as follows:

Annuals.—Weeds which germinate, bloom, fruit, and die in one year or season, which class includes:
- Annual sow-thistle.
- Russian thistle.
- Tumbling, bull, and wild mustards.
- Stinkweed.

Biennials.—Weeds which produce leaves and roots the first year and flowers and seeds the second year, after which they die, to which class bull thistle belongs.

Perennials.—Weeds which last from year to year, blooming and seeding annually. These are subdivided into two classes:

(a) Weeds which have underground creeping stems or root stalks, such as:
- Canada and perennial sow-thistles.

(b) Weeds with roots which do not spread underground, such as oxy-eye daisy.

GENERAL INSTRUCTIONS RE CONTROL AND ERADICATION OF NOXIOUS WEEDS.

1. Never allow weeds to mature seeds. Cut those on the roadsides, headlands, in waste places, and in fence corners, as well as those in the fields.

2. Sow only pure seed. Impure seed is dear at any price. Pure seed is the purchaser's right by law and he should insist on having it.

3. Avoid feeding stock upon grain or meal containing weed-seeds in any quantity. Such feed should be heated, ground or boiled before being fed.

4. Annuals and biennials may be controlled by frequent and thorough plowing or cultivation. By shallow cultivation the seeds are kept near the surface; if cultivated they are made to sprout; and, having sprouted, they can be killed by further cultivation. The seeds of some annuals will remain in the soil for twenty years if ploughed down beyond the reach of the air, and will germinate when brought to the surface. Do not plough more than 3 or 4 inches deep if the field is infested with annual weeds, such as wild oats and mustard.
(5.) For perennials frequent shallow cultivation is essential. Each weed of this class needs special treatment to eradicate, but the general principle obtainable that if the weeds are not allowed to make any vegetative growth for one year it must perish die out. To facilitate this, summer follow and grow food crops, such as potatoes, corn, and roots, in the rotation.

13. Hand-pull single specimens.

17. A flock of sheep renders valuable assistance.

18. Be constantly on the watch for new weeds. Do not wait until a weed has become established before finding out what it is. If you cannot identify it, forward a specimen, carefully wrapped in damp cloth or moss, to the Department of Agriculture, Victoria, B.C.

SPECIFIC INSTRUCTIONS RE IDENTIFICATION AND ERADICATION OF NOXIOUS WEEDS.

ANNUALS.

1. Annual Saw-thistle.- Roots thorny; stems leafy, 1 to 1 foot high; flowers in clover clusters, pale yellow. Flowers May to August; produces seed July to September.

To eradicate: Pull out shallow as early as possible after harvest and cultivate frequently during autumn. Sow food-crop and cultivate thoroughly during growing season. Follow with grain-crop seeded with clover. Hand-pull weeds in grain-crop and take one or two crops of hay or pasture before breaking up soil. Never allow it to go to seed.

2. Russian Thistle.—A bushy plant; leaves short, thin, and prickly-tipped, giving whole plant prickly appearance. A tumbledweed, hence spherical in general appearance. Flowers and seeds appear in balls of leaves. Flowers July to September; produces seed August to November.

To eradicate: Narrow grain-crops as late as possible. Prevent ripening of seed in orchards, fence corners, roadsides, etc. Mow, rake off, and burn to prevent scattering by wind.

3. Tumbling Mustard.—Stems 2 to 1 feet high, much branched; leaves at the base resemble dandelion-leaves, while upper leaves are more finely divided; flowers yellow, 1/3 inch across; seed-pods 2 to 1 inches long, very slender, ending in small flattened bulbs, which assist in the identification of the weed. Each pod contains about 120 seeds. Very few hairs on plant except at its base.

To eradicate: Plant clean seeds, rotate cultivated crops; and dormant seeds in soil to grow by frequent shallow cultivations. Hand-pull plants and never allow to produce seed.

4. Wild Mustard or Charlock.—Stems 1 to 2 feet high, rough, slightly branched, hairy, and purple at nodes where produced; leaves large and rough at edges; flowers bright yellow, fragrant; 1 inch across; seed-pods 1 to 2 inches long, contain 10 to 15 seeds.

To eradicate: See "Tumbling Mustard."

5. Bull Mustard.—Stems slender and erect, with few branches, 1 to 3 feet high; leaves arrow-shaped; flowers orange-yellow, 1/2 inch across; seed-pods small and round, contain 1 seed each.

To eradicate: See "Tumbling Mustard."

6. Sisyrinchium.—Stem erect, slender, and slightly branching; leaves small and bright green; flowers minute, white, and grow in clusters; pods flat, characteristic shape, 1/4 inch across, and pale green in colour. The colour of the plant is characteristic. Flowers May to November; produces seed May to November.

To eradicate: Practice shallow cultivation and grow food crops. Do not allow stock to graze, as they scatter the seed by means of feet in damp weather. Hand-pull small patches and burn weeds as soon as dry.

7. Wild Oats.—Very similar to tame oats. Particles ripens at the top first; kernels have long awns attached to backs, sucker-like montils, and short stiff hairs around basal end. Ripens earlier than tame oats and sheds readily.
To eradicate: Practise rotation of crops, sow clean seed, and till cultivation to reduce seeds to germinate in the spring, when their destruction is easy. The growing of floured barley and the seeding down to alfalfa and clover for hay has been practised with success.

18.1 Rapest.—A coarse branching plant with hairy stems, 2 to 4 feet high; leaves divided; flowers small and yellowish; seeds small, brown, and pear-shaped. Plant has a detectable odour. Flowers June to September; produces seed July to November.

To eradicate: Hand-pull from grain-fields and cut where found on roadsides and in waste places. Badly infested grain-fields should be ploughed immediately after harvest.

19.1 Blue Pigeon or Shredded.—Stems erect, 1 to 2 feet high, covered with numerous white hairs; leaves long, hairy, and stalkless; flowers small, pale blue, about 1-4 inch across; seeds 1/4 inch long, pear-shaped, with barbed bristles on one side.

To eradicate: Saw clean seed, practise thorough spring cultivation, and pull scattered plants. Mow young plants where found in waste places to prevent formation of seed.

20.1 Bedder.—A parasitical plant; the stems long and slender, twine about host-plants (usually alfalfa and clover); flowers white or pinkish in clusters; seeds small, brown, and irregular in shape. Plants appear to have no leaves. Young plant has roots, but these die as soon as host-plant is found.

To eradicate: Saw clean seed, cut infested fields early and either burn or make hay of the crop.

Biennial.

(11.) Bull-thistle.—A tall, coarse appearing plant; leaves woolly; flowers very large, 1-3 inches long by 1-3 inches across, and purple in colour; flowers June to August; produces seed July to September. Abounds in waste places.

To eradicate: Plough or cut down before the flowers open. In pastures cut below the crown of the plant. Prevent formation of seed for two years.

Perennial.

(12.) Canada Thistle.—A thistle with deep running root-stalks; stems 1 to 5 feet high; leaves variable in size, curled, very prickly, and downy on the underside; flowers small, 1/4 to 3/4 inch across. They vary in colour from pale purple to pink.

To eradicate: Plough deeply just as the flowers open and continue with very thorough cultivation. Do not allow any growth for one year. Short crop rotations are effective.

13.1 Perennial Sow-thistle.—A deep-rooted plant with vigorous root-stalks; stems 1 to 3 feet high, hollow, and branched at the top; each branch bears a number of orange-yellow flowers 1-2 inches across. Leaves long and very irregular. Plants full of bitter, milky juice.

To eradicate: Prevent hair-growth by cultivating field frequently with plough or broad-toothed cultivator. Grow cultivated crops. (See "Canada Thistle.")

(14.) Oxye Daisy.—A shallow-rooted plant; stems 1 to 3 feet high; leaves heart-shaped and toothed; flowers single on long stalks, white with yellow centres. 1-1/2 to 2 inches across. Usually found in old pastures.

To eradicate: Saw clean seed. Infested sod should be ploughed shallow in August and cultivated until the frost comes. Crop rotations are beneficial.

Note.—It is very important that those engaged in farming should get to know the worst weeds and the weed-seeds most frequently found in commercial seeds. This they can do with little trouble. Strange weeds should be sent to the Department of Agriculture, Victoria, B.C., for identification, and a collection of the most common weed-seeds should be secured for reference and comparison.

The Department of Agriculture is at the service of farmers, gardeners, Weed Inspectors, and others in the identification of weeds, weed-seeds, plant-diseases, grasses, and economic plants. Plant specimens and samples of seeds should be carefully packed and addressed, with postage prepaid, to the Department of Agriculture, Victoria, B.C.
Wild oats.
Wild mustard.
Ox-eye daisy.
Blue burr or stelkseed.
Perennial sow-thistle.
Tumbling mustard.
Annual sow-thistle.
Russian thistle.
Field dodder on red clover. (a) Flowering cluster; (b) cluster of dry seed-vessels.
CHAPTER 66.

HIS MAJESTY, by and with the advice and consent of the Legislative Assembly of the Province of British Columbia, enacts as follows:—

Short Title.
1. This Act may be cited as the "Noxious Weeds Act."

Interpretation.
2. In this Act, unless the context otherwise requires, the following expressions have the meaning hereinafter respectively assigned to them, namely:—

"Assessor" means a Municipal or a Provincial Assessor, according to the context:

"Department" means the Department of Agriculture;

"Inspector" means an Inspector appointed under this Act or any police officer or constable, whether Provincial or municipal;

"Minister" means the Minister of Finance and Agriculture;

"Non-resident land" means all land which is unoccupied and is owned by a person who is not resident within the Province, or by a corporation not having a place of business in the Province; and "resident land" means all land which is occupied or which is owned by a resident of the Province, or by a corporation having a place of business in the Province;

"Noxious weeds" means and shall include Canada thistle, perennial thistle, sow-thistle, bull-thistle, Russian thistle, ox-eye daisy, wild mustard or charlock, tansy mustard, bull mustard, wild oats, stinkweed, ragweed, blue burr or stickseed, dodder, and such other weeds as may be specified by an order in Council published in at least two consecutive issues of the Gazette;

"Owner" includes every person who has any estate or interest in land.

Destruction of Weeds.
3. (1.) It shall be the duty of every occupant of land, or, if the land is unoccupied, it shall be the duty of the owner thereof or the accredited agent of such owner resident in the Province, to cut down and burn or effectively destroy all noxious weeds growing on such land, in each year between the first day of April and the first day of November, as often as may be necessary to prevent the ripening and scattering of the seed of noxious weeds.

(2.) For the purpose of this Act, the Council of any municipality shall be deemed to be the owner of all lands within the boundaries of the municipality, including streets, parks, and vacant lots, and of that portion of any road adjoining the municipality which lies between the centre line thereof and the municipal boundary.

4. Every owner or occupant, or agent of an owner or occupant, failing or neglecting to observe and carry out the provisions of section 3 shall be liable to a penalty of not less than twenty-five dollars nor more than one hundred dollars, to be recovered with costs by proceedings under the "Summary Convictions Act," and in default of payment the offender shall be liable to imprisonment for a term not exceeding six months.

5. It shall be the duty of every Municipal Council and every such Council is hereby empowered to make due provisions by by-law for the eradication and destruction of noxious weeds growing within the limits of the municipality and on every road and highway immediately adjoining the municipality to a distance or extent of that half of the width of such road or highway which is nearest to the municipal boundary.

6. (1.) It shall be the duty of every railway company to cause all noxious weeds growing on the right-of-way and over land of the company adjoining the railway, and it shall be the duty of every irrigation company to cause all noxious weeds
growing in or upon the ditch or right-of-way of the company, to be cut down or to be rooted out and burned or otherwise destroy, as often as may be necessary each year before the plants have sufficiently matured to seed.

12. Every railway company and every irrigation company which fails to comply with this section shall incur a penalty of two dollars for every day during which such company neglects to do anything which it is required to do.

13. The Mayor or Reeve of the municipality or the Government Agent of the district in which the said land or ground lies may cause all things to be done which the said railway company or the said irrigation company is required to do, and for that purpose may enter by himself and his assistants or workmen upon such land, and the municipality or the Minister, as the case may be, may recover the expenses and charges incurred in so doing, with costs, in any Court of competent jurisdiction.

7. This Act shall apply to the whole Province, but the Lieutenant-Governor in Council may exempt from its operation large tracts of waste or unoccupied land in unorganized territory.

Notification to Owners, etc.

8. (1.) Any Inspector finding noxious weeds growing on occupied lands shall notify the occupant thereof to burn or otherwise effectively destroy such weeds within seven days from the date of such notice.

(2.) Any Inspector finding noxious weeds growing on unoccupied lands shall notify the owner or registered mail addressed to his last known address (if any) to burn or otherwise effectively destroy such weeds within seven days from such notice.

(3.) Any Inspector finding noxious weeds growing in or upon any ditch or right-of-way of any irrigation company shall notify the manager, superintendent, or other officer of the Company, either personally or by registered mail, to burn or otherwise effectively destroy such weeds within seven days from the date of such notice.

(4.) Any Inspector finding noxious weeds growing on any railway right-of-way or on any unoccupied land owned by or forming part of the land grant of any railway company shall notify the nearest station agent, either personally or by registered mail, to burn or otherwise effectively destroy such weeds within seven days from the date of such notice.

9. Where noxious weeds are growing upon non-resident land it shall not be necessary to give any notice before proceeding to cut down and burn or otherwise destroy them, but it shall be the duty of the Inspector to cause such noxious weeds to be burned or otherwise effectively destroyed forthwith.

10. When noxious weeds are growing upon any lands of the Crown, such notice as aforesaid shall be left at the office of the deputy of the Minister if such lands are within the Victoria Assessment District, and if without the Victoria Assessment District, at the office of the Government Agent of the Government of the Province, and it shall be lawful for the deputy, or Government Agent, as the case may be, to employ the necessary labourers and to eradicate and burn or otherwise effectively destroy such noxious weeds, and the expenses incurred in so doing shall be paid out of the Consolidated Revenue Fund; provided, however, that this section shall not apply to that half of the width of any road which adjoins the boundary of a municipality.

11. The notice to be given by the Inspector shall be in writing and shall be sufficient if in the form in the Schedule or to the like effect.

12. Any person to whom notice has been given under any of the preceding sections who neglects to carry out the directions contained therein shall be guilty of an offence, and on summary conviction thereof shall be liable to a penalty of not exceeding one hundred dollars and costs.

13. In case noxious weeds are not cut down and burned or otherwise destroyed on any land pursuant to any notice given by an Inspector, or in case the name and address of the owner of such land is unknown, or the owner is a non-resident of the Province, the Inspector or any person or persons directed by him may forthwith
order upon the land with the necessary implements and root up and burn or other
wise effectively destroy the noxious weeds thereon.

11. Every Inspector of Noxious Weeds, for the purpose of performing his duties
and exercising the powers herein contained, shall have the right to enter upon any
land without the consent of the owner or occupant, and no inspector shall be de-
emed a trespasser by reason of such entry or be liable for any damage occasioned by
reason thereof, unless such damage was occasioned by such inspector willfully and
unnecessarily.

Inspectors.

15. The Lieutenant Governor in Council may appoint as inspectors such persons,
other than police officers and constables, as may be required for the more efficient
carrying-out of the provisions of this Act, and may fix the remuneration of such
inspectors.

Expenses and Accounts.

16. (1.) Every inspector shall keep an accurate account of the expenses incurred
by him in carrying out the provisions herein contained applicable to his duties with
respect to each parcel of land entered upon, and shall furnish a detailed statement,
verified by statutory declaration, of such expenses, describing the land entered upon,
to the Minister, Government Agent, or Municipal Clerk, as the case may be, and the
said expenses shall be audited and such sum as may be deemed just shall be
allowed, and a certificate for the amount allowed shall be issued by the Minister,
Government Agent, or Municipal, and shall be prima facie evidence that the
amount named has been expended in carrying out the provisions of this Act.

(2.) Such sums as have been so allowed shall, on production of such certificate
to the collector, be placed upon the municipal or Provincial collector's roll, as the
case may be, against the land described or referred to in the statement of the
inspector, to be collected in the same manner as other taxes.

(3.) In the case of noncompliance with notice, or nonresident owners, a certifi-
cate signed by the Minister, Government Agent, or Municipal Clerk, that certain
expenses have been incurred in the destruction of noxious weeds, shall be prima
facie evidence that the said amount has been so expended, and shall be accepted by
the Assessor for collection in the same manner as other taxes: Provided, however,
that said certificate shall not, for the purpose of the sale of land, be effective until
the first day of January next after the year in which such certificate was issued.

Funding Grain containing Noxious Weeds.

17. (1.) Any person who sells or gives for cool purposes any grain, grass, or
other seed, among which there is present seed of noxious weeds, in a greater propor-
tion than five to one thousand of the said seed or offered, exposed, or held in pos-
session for sale, shall be liable, on summary conviction, to a penalty of not less than
ten dollars or more than one hundred dollars, and the Magistrate making any con-
viction under this section may order that the grain, grass, or seed sold contrary to
the provisions of this section shall be condemned or destroyed.

(2.) Any person who knowingly conveyed or noxious weeds from one farm
another, either in threshing machines, farming mills, or otherwise, shall, on summary
conviction, be liable to a like penalty.

Penalties.

18. (1.) The penalties provided by this Act shall be recoverable by proceedings
under the "Summary Convictions Act."

(2.) Violation of any provision of this Act for which no penalty is provided
shall be an offence, and the offender shall, on summary conviction, be liable to
a penalty not exceeding fifty dollars and costs.

Repeal.

19. Chapter 240 of the "Revised Statutes of British Columbia, 1911," and
chapter 52 of the Statutes of 1914 are hereby repealed.