

SURVIVORS OF THE PAST: WILL THEY HAVE A FUTURE?

THE RARE NATIVE PLANT SPECIES OF THE COMMERCIAL FOREST

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To start with I would like to thank the Forestry Department for giving me this opportunity to speak concerning rare plants. I would also like to compliment the Forestry Department for all their efforts through inventory research to better manage the commercial forest of Saskatchewan. Yours is a serious responsibility as guardians of the forest and I admire the program for forest fire control and prevention, but as to clearcutting and reforestation there are some areas of concern.

I have hoped that the birds and mammals that need a mature forest habitat will survive by moving into the remaining buffer zones around the lakes, and also into the woods left by the harvest rotations. Limitations to smaller local habitats will not mean greater losses by the predation of enemies. The well-being of every species needs to be continuously monitored with much caution and care.

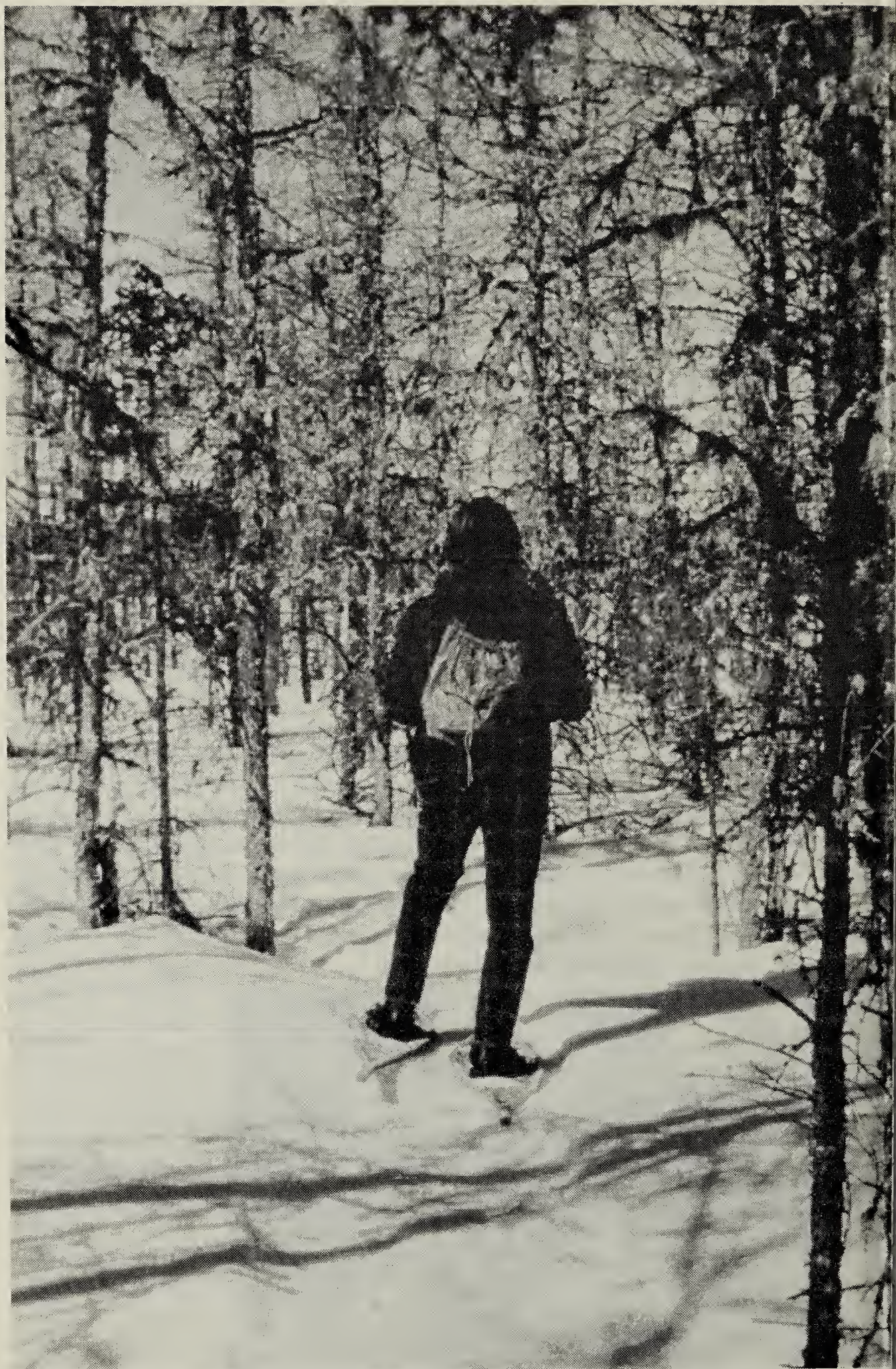
Many of the plants of the forest thrive with disturbance and grow with profusion like never before in the open cuts and on bulldozed banks. Asters, goldenrods, wormwoods, Cut-leaved Ragwort, Tall Lungwort, Fringed Bindweed, Fireweed and Pea-vine, and some of the grasses and sedges burst forth like the glory of a botanical garden. (Introduced weeds from the farmlands also get established into the skidways, but they generally disappear as the area is reforested.) A lot of people welcome this profusion of growth for what was once mossy woods is providing food for the game.

The area of concern is the rare and delicate species that need cool moist woods to survive. There are 1700 to 1800 species of vascular plants in Saskatchewan. Of the native species 298 were listed as rare in the book "The rare vascular plants of Saskatchewan" (1979: Maher, Argus, Harms and Hudson). In the

last 10 years about 10 new species have been found. The rare native plants of Saskatchewan total well over 300, which is about 6% of our total plant species. Of these rare species 88 grow in the commercial forest and about 33 of



Chimaphila umbellata is found in Cypress Hills and other scattered locations in the forest.
G.J. Smith



Recreation, snowshoeing at Boundary Bog in Prince Albert National Park

D. McKes

em depend upon a forest canopy for
istence. The Cypress Hills are of special
anical interest for many Rocky Moun-
n species are found there. On the other
nd the eastern side of the commercial
est has many eastern species that are
reme outliers from their normal range.
e main areas are Duck Mountain, Por-
pine and Pasquia Hills, with some
cies even extending to the Cub and
pawekka Hills.

When we discover a new plant species
the province people ask questions like
where did it come from? Did the birds
y the seed? It is true that seeds are
ad by wind, water and living crea-
es, but in many cases when it comes to
plants they were always there in that
cial habitat as survivors of the past.
y have come down to us through
-glacial floods, great climatic chan-
and many ravaging forest fires that
le them even more local and rare than
, while the hardier common species
have adapted themselves to these
nges have returned and replenished
nselves again and again. A number of
rare species are already extirpated in
e of the states of the U.S.A. With the
hods of clearcutting and silviculture
a slogan — "Forever Forests," I would
to ask "how many of these rare plant
cies will be here forever?"

me of the most delicate plants are the
ids. Of the 21 species found in the
son Bay area 10 are rare in Sas-
newan and 7 are protected in Canada
ederal law, requiring export permits.
of these orchids disappear when
rbance and clearcutting come to the
mossy woods.

me might ask why we don't move
e plants out of the way of the logging
stry and establish them somewhere
This could be done in some extreme
s, but whenever you move plants
are no longer in a native condition
they become introductions. Let me

ask "should all the elephants be in the
zoos and none left in the jungles?" Again
someone might say these rare species can
survive in the parks. That is a good notion,
but sad to say many of the rare species do
not occur in the parks simply because the
main object in choosing an area for a park
has recreation and sports in the forefront.

As guardians of the forest I feel that we
have a serious responsibility for the well-
being of every species. Along with timber
harvest it is of great benefit for the rare to
survive and be protected where neces-
sary. This is of great importance to the
Forestry Department by showing the
public that along with this all out harvest



Dragon-mouth Orchid or Swamp Pink
(*Arethusa bulbosa*) Chris Adam

we are protecting special areas of concern. These areas are also of great benefit in the field of tourism which continues year by year while you wait another 100 years for the next forest to grow up for reharvest. It will be very sad if we realize too late, after many species are extirpated, that we should have done something to save them. This would be something like the tourists that were in Japan recently, and while in a beautiful park they remarked about the lovely singing of the birds. They were told that it all came over the loudspeakers since the birds had disappeared years before.

I have guided several botany tours in the Hudson Bay area and have found the response overwhelming. In three days we would go from the Pitcher Plant bog at Greenbush, the Bainbridge Canyon in the Pasquia Hills, the Nitenai River Salt Marsh to the Rendek Elm Forest and the mossy, ferny woods of Brockelbank Hill, which is the highest point in the Porcupine Hills. These special spots are valuable and important.

I hereby appeal to the Forestry Department to make an amendment to the forestry act that will establish a *rare plants protection policy*; that environmental impact studies be done in special areas where rare species are endangered by clearcutting, and the most vital of these special areas be protected and set aside, so these rare understory species that depend on the forest canopy, can continue to exist in Saskatchewan.

Special rare plant areas in the commercial forest

CANDLE LAKE — 15 species of rare Saskatchewan plants including 2 sub-arctic species

AMISK LAKE — limestone cliffs with 26 species of rare Saskatchewan plants

CUMBERLAND DELTA — mostly unbotanized; large areas of sodium chloride

marshes. The only known Saskatchewan locality for three ocean salt marsh species.

PASQUIA HILLS — 36 species of Saskatchewan plants. Many eastern species, as well as some sub-arctic western species.

PORCUPINE HILLS — Brockelbank Hill and north slope — 29 species of Saskatchewan plants. This area contains the only Saskatchewan sites known for 4 species of plants.

Macdowall Forest

PROPOSED MACDOWALL FOREST AND BOG NATURAL AREA — forest and bog areas between C.N.R. tracks and McFarlane Creek support 15 provincially rare vascular plants.

Rare plants hot spots

It is recommended that the Forestry Department work very closely with the botanist in these special areas. Some local spots should be set aside as protected areas with no logging allowed. Others could be logged using special care, and small equipment on mature trees only.

It is interesting to note that the areas of parks have been chosen mainly for recreational purposes. It is sad to say that many of these rare plant species do not occur in the parks.

This article is [with only very minor modifications in organization] the presentation that was given to the Forestry Advisory Committee on 30 January 1980 by the SNHS representative, Dr. L. Hooper. The presentation also included a description of the habitat and status of a sample of 12 provincially rare species and a list of 29 rare species that occur in the Brockelbank Hill area. Following the report that he gave to the SNHS directors at their next meeting.