

# Time Trends for Agricultural Crop Production in Saskatchewan, Canada: 1905-2011



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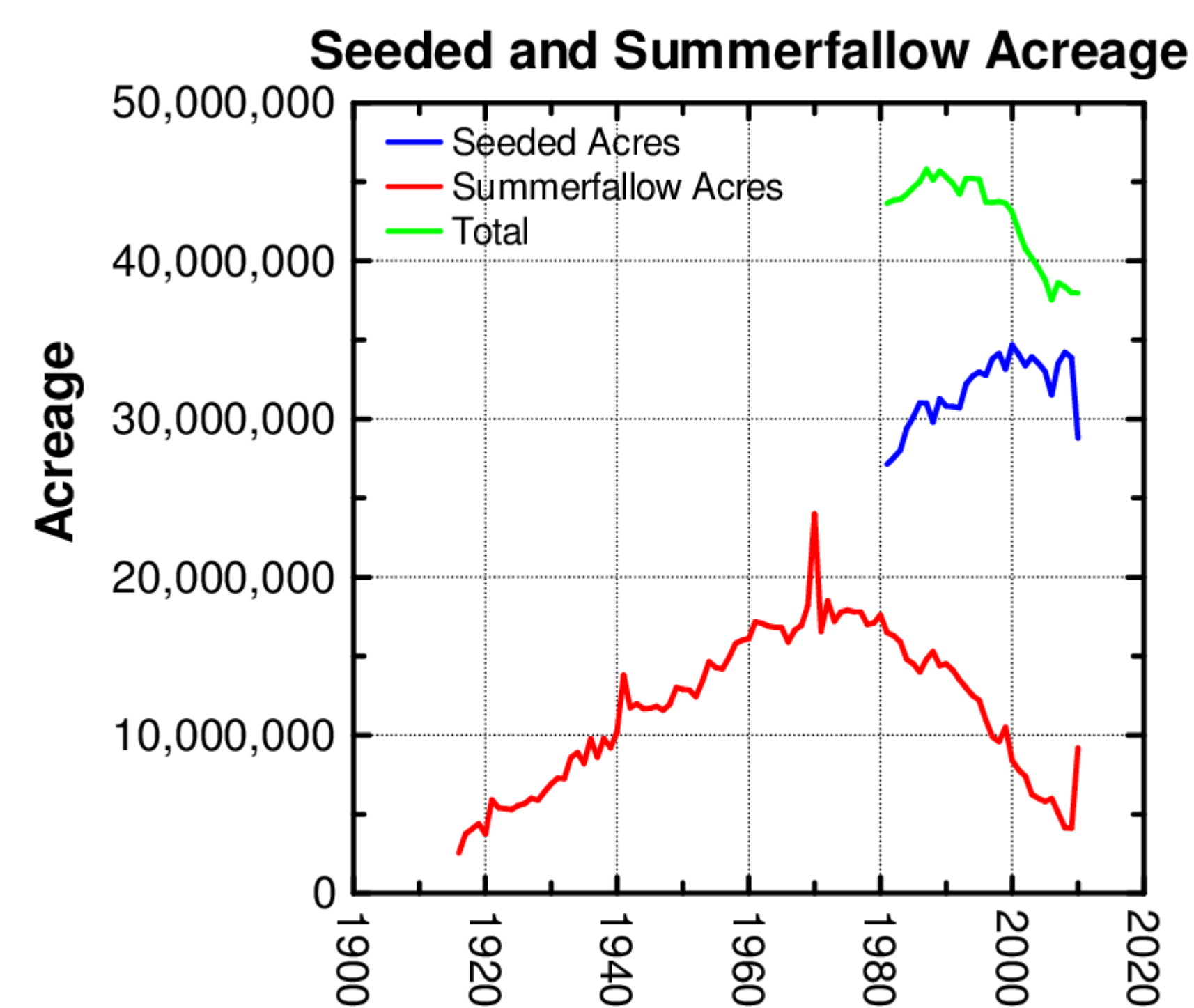
## Introduction

- Saskatchewan is one of the world's most productive agricultural cropping regions
- the total land area is 651,900 km<sup>2</sup>
- about 44% of Canada's total cultivated farmland is in the province
- total export value of crops was \$8.34 billion in 2008
- changing industry economics and advances in scientific, technical, and engineering knowledge and practices have affected the amount and type of crops produced over the past century

## Methods

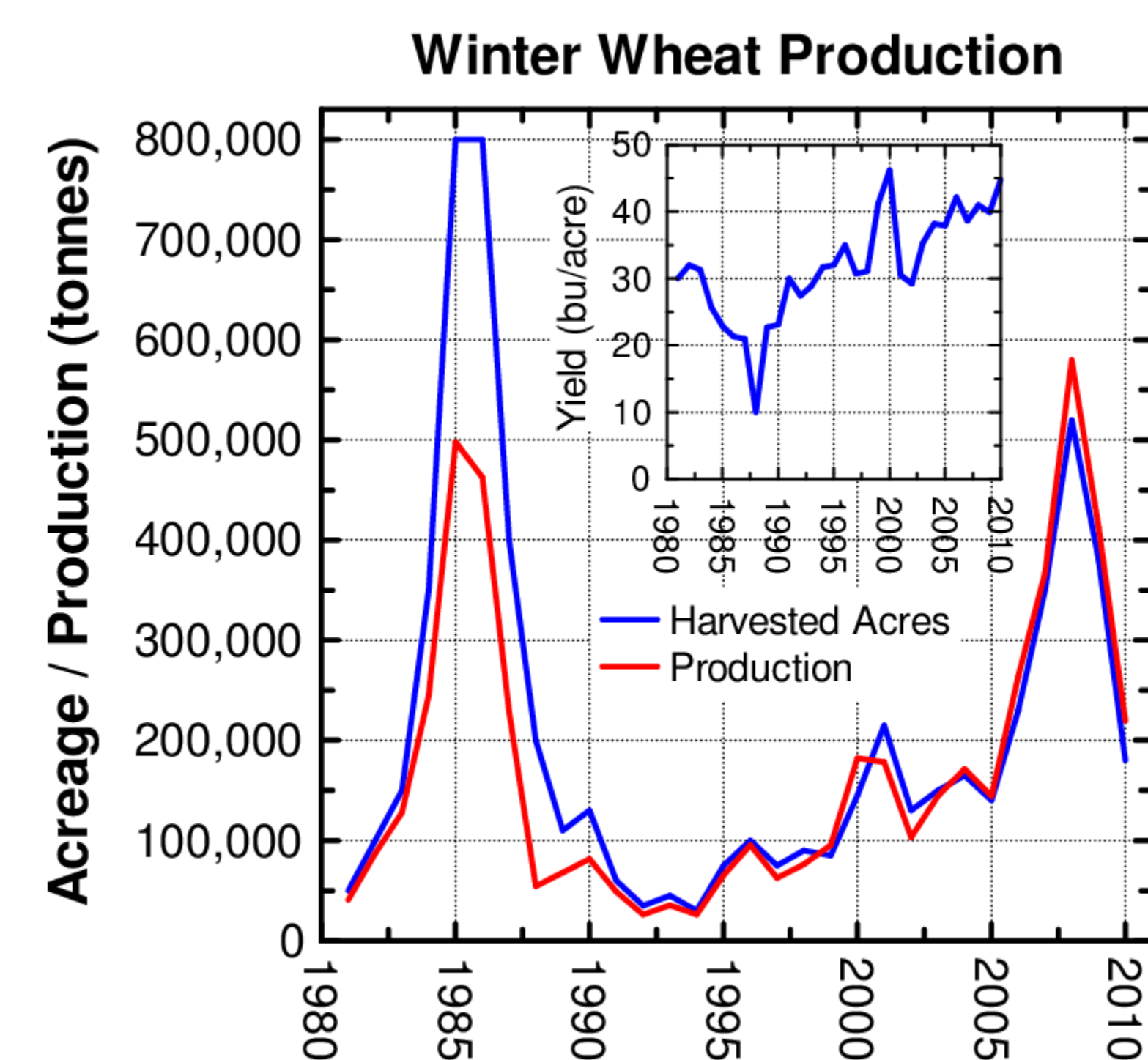
- crop statistics were obtained from the Government of Saskatchewan Agricultural Statistics online database: <http://www.agriculture.gov.sk.ca/Statistics>

## Results and Discussion

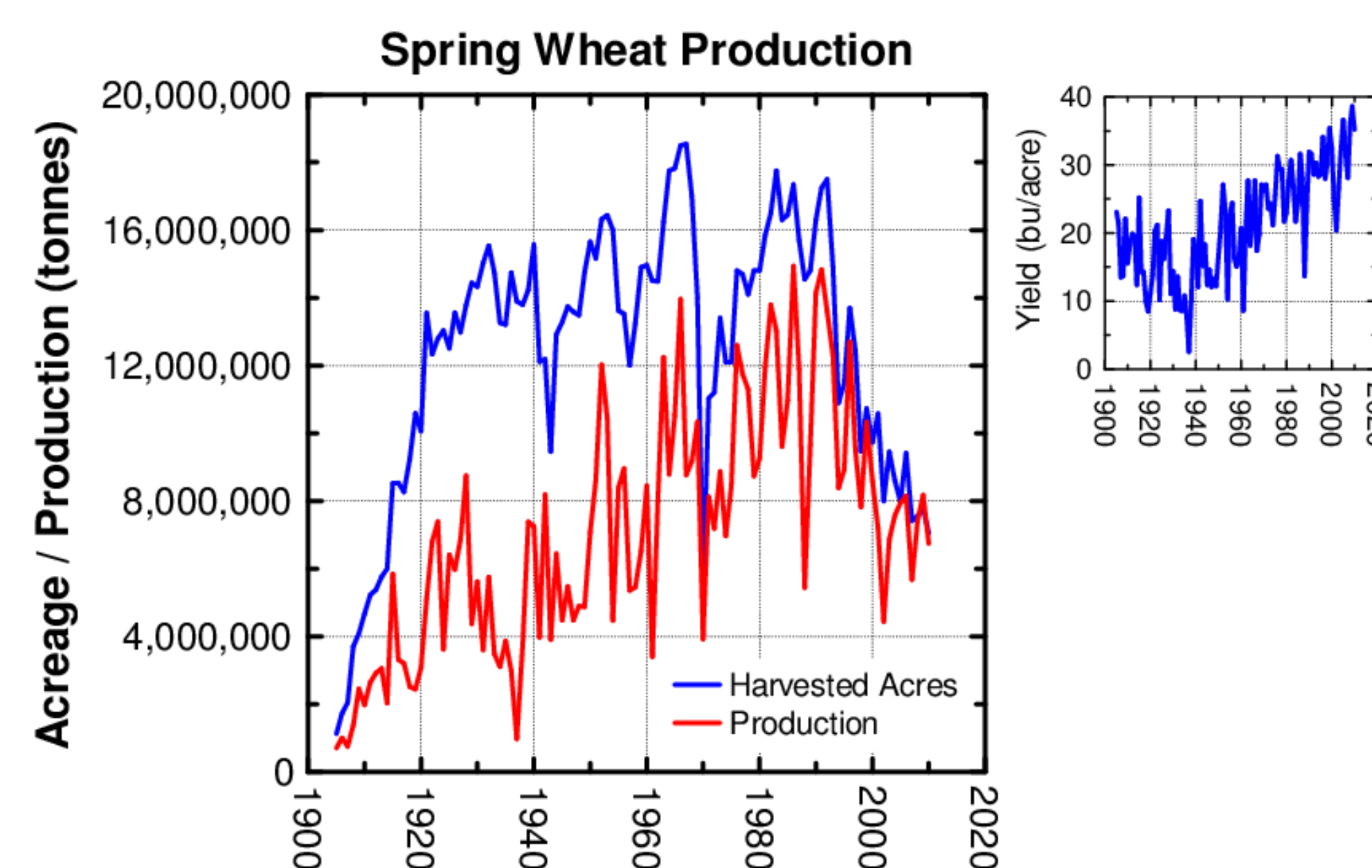


- summerfallow acreage increased from the 1910s through to the late 1960s/early 1970s, then declined to near historic lows by the late 2000s
  - a modest increase over the last year is evident
- seeded acres increased between 1980 and 2000, were stable during the 2000s, and declined sharply in 2010
- total acreage increased slightly during the 1980s, declined slightly during the 1990s, and declined more sharply during the 2000s

## Results and Discussion

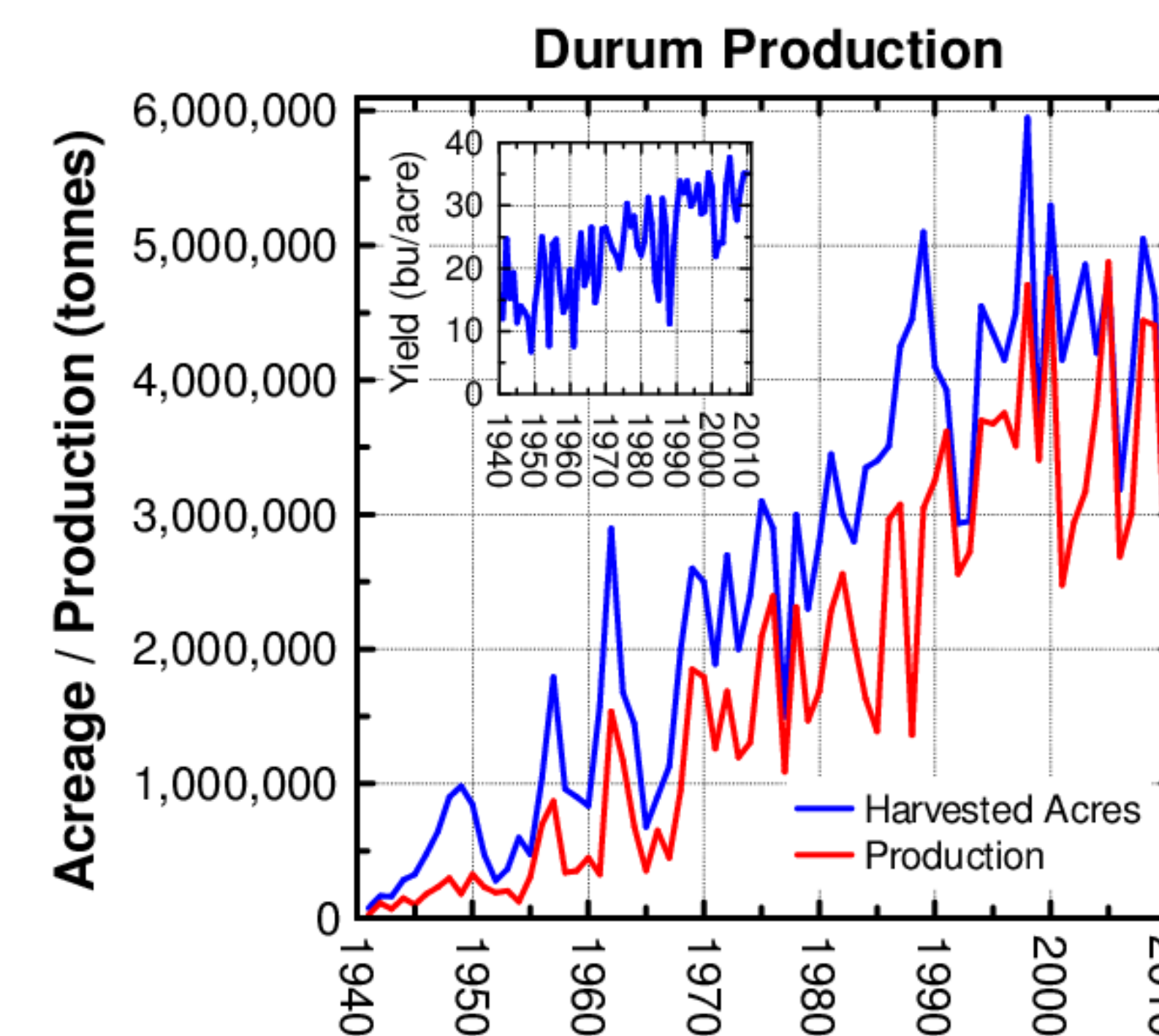


- winter wheat acreage/production has been highly variable since 1980, peaking in the mid-1980s and late 2000s
- yields have increased steadily since the mid-1980s

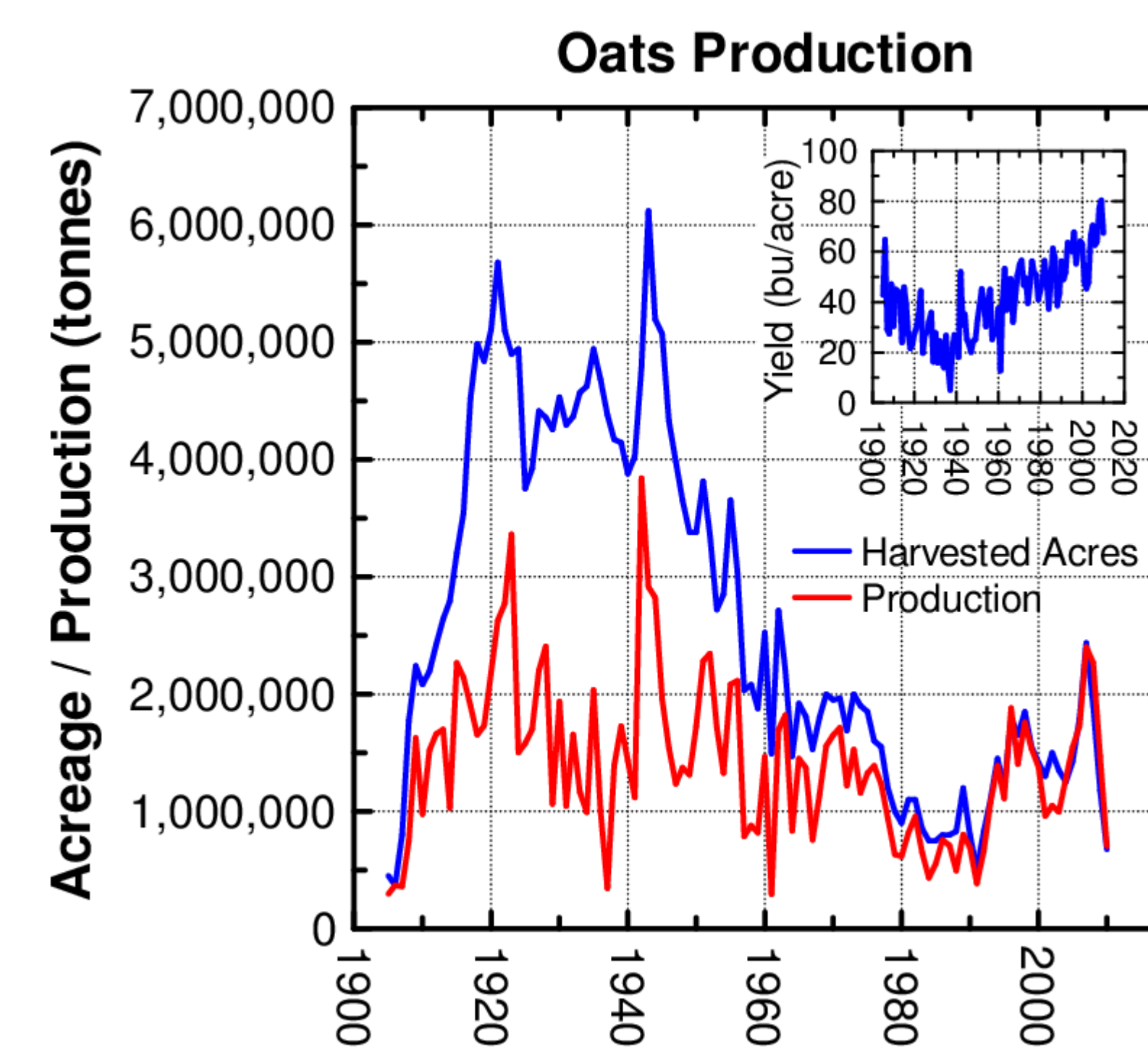


- spring wheat acreage/production has been highly variable since the 1900s, generally increasing up to the late 1980s/early 1990s and declining steadily to the present
- yields have increased steadily since the 1930s/1940s

## Results and Discussion

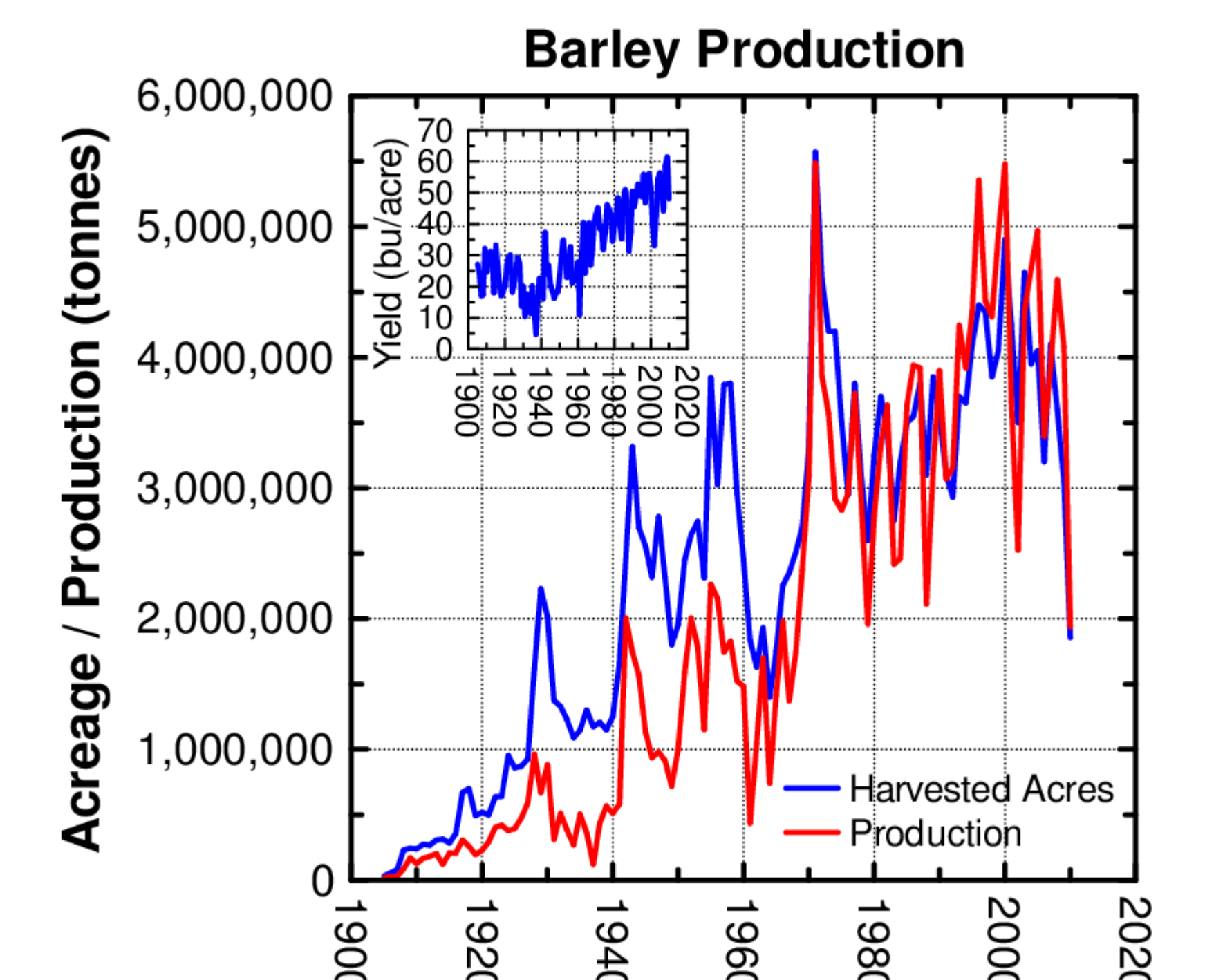


- durum acreage/production increased between the early 1940s and the late 1990s, and has since levelled off
- yields have increased steadily since the 1940s

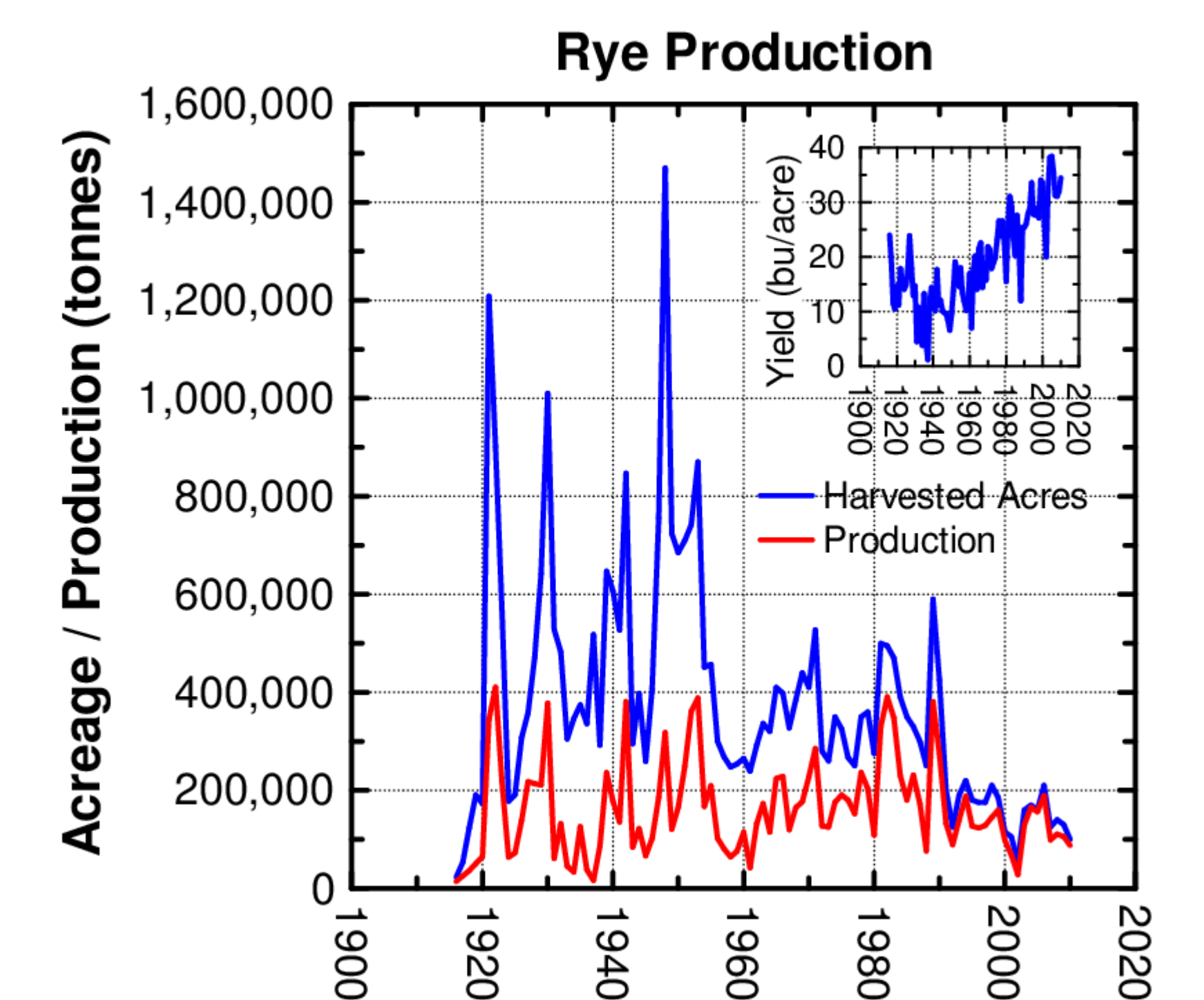


- oats acreage reached a maximum between 1920 and the early 1940s and has since declined
- oats production has remained approximately constant since the 1900s
- yields declined between the 1900s and the late 1930s and have increased steadily up to the present

## Results and Discussion



- barley acreage/production increased steadily from the 1900s to the late 1990s, and appears to have declined slightly over the past decade
- yields were stable between the 1900s and late 1920s, then declined until the late 1930s, and have since increased steadily up to the present



- rye acreage/production has been highly variable since the 1910s and appears to have remained approximately constant up to the present (although the large acreage peaks that occurred between the 1920s and 1940s no longer take place)
- yields declined between the 1910s and late 1930s and have since increased steadily

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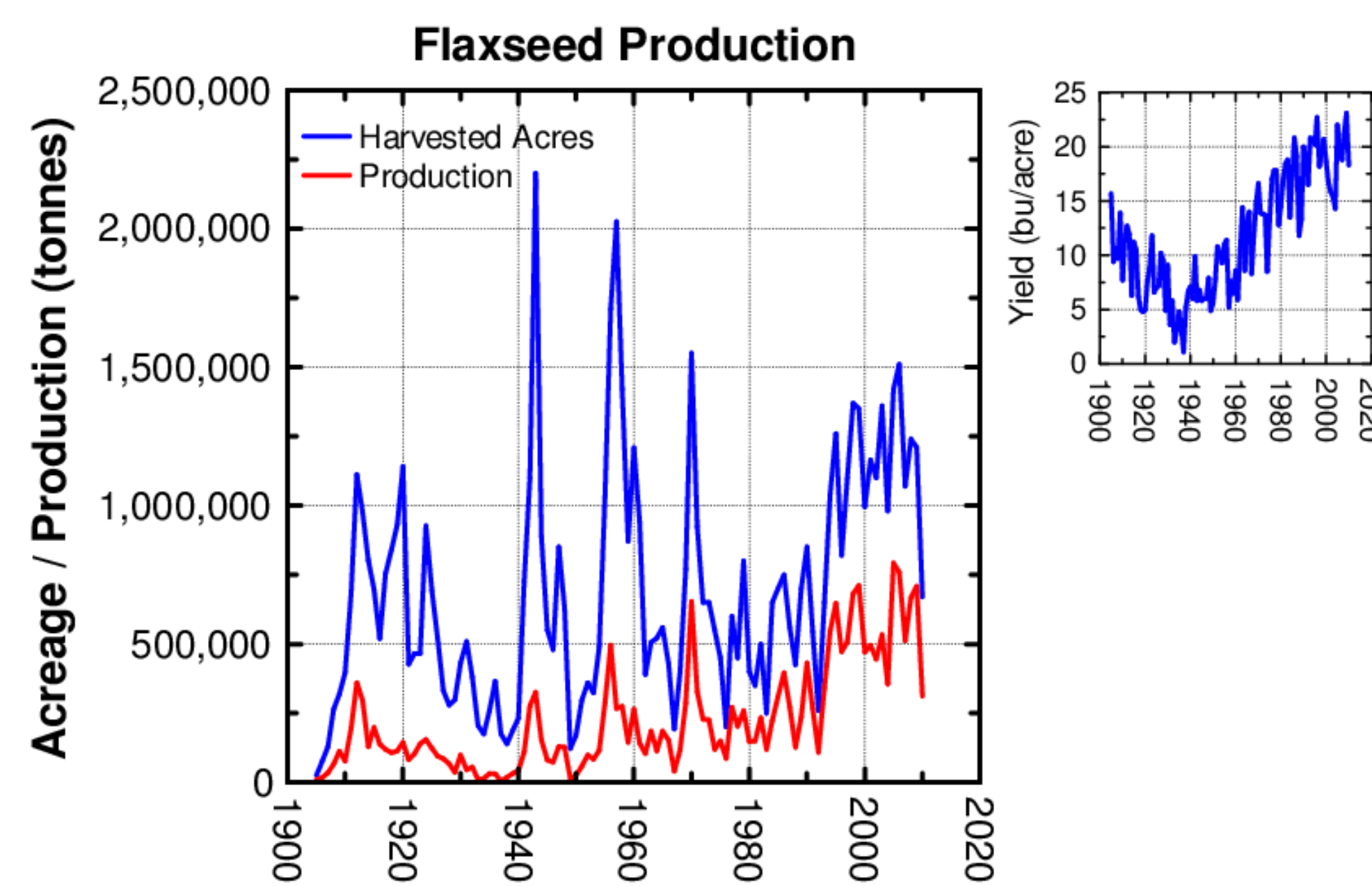


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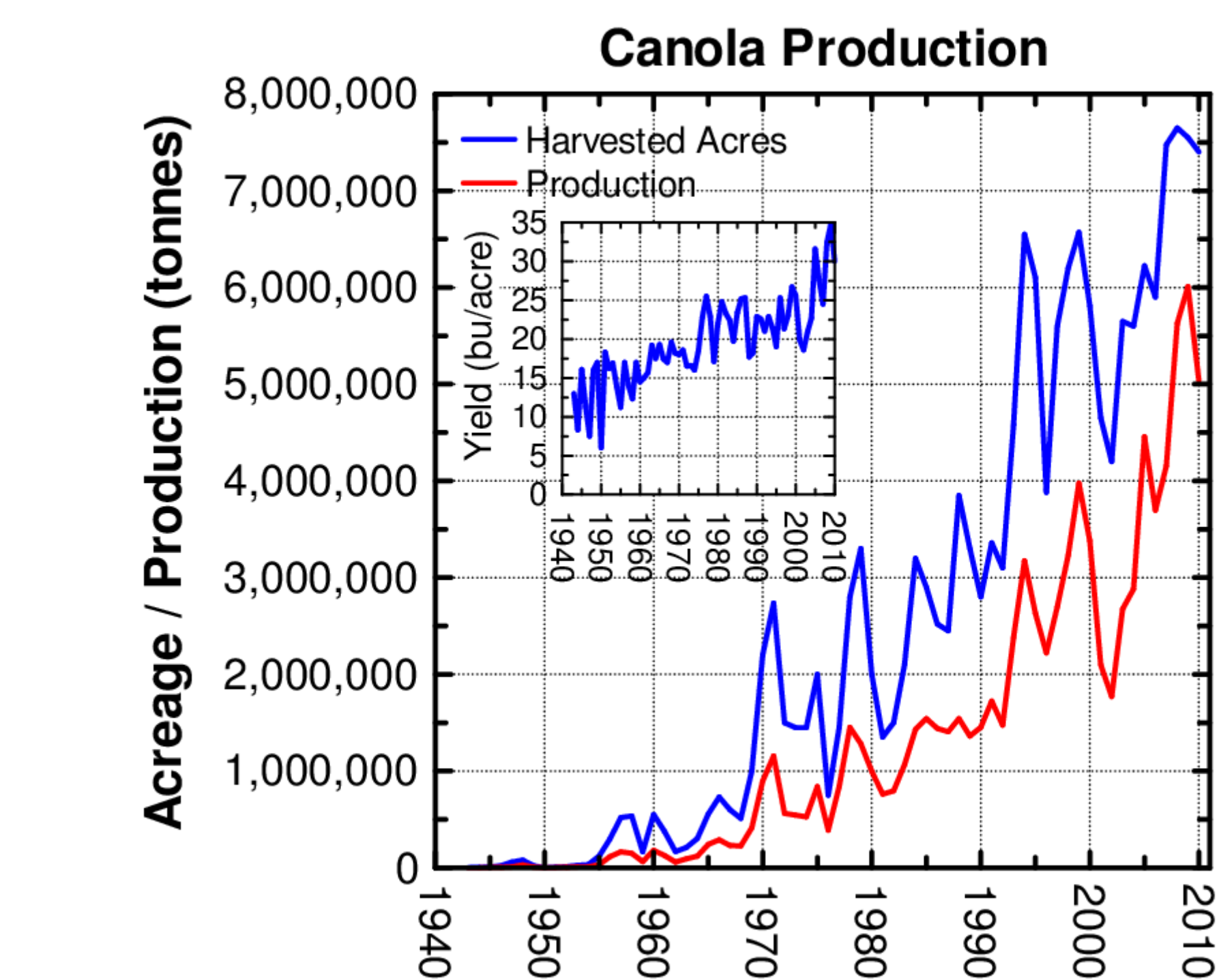
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## Results and Discussion

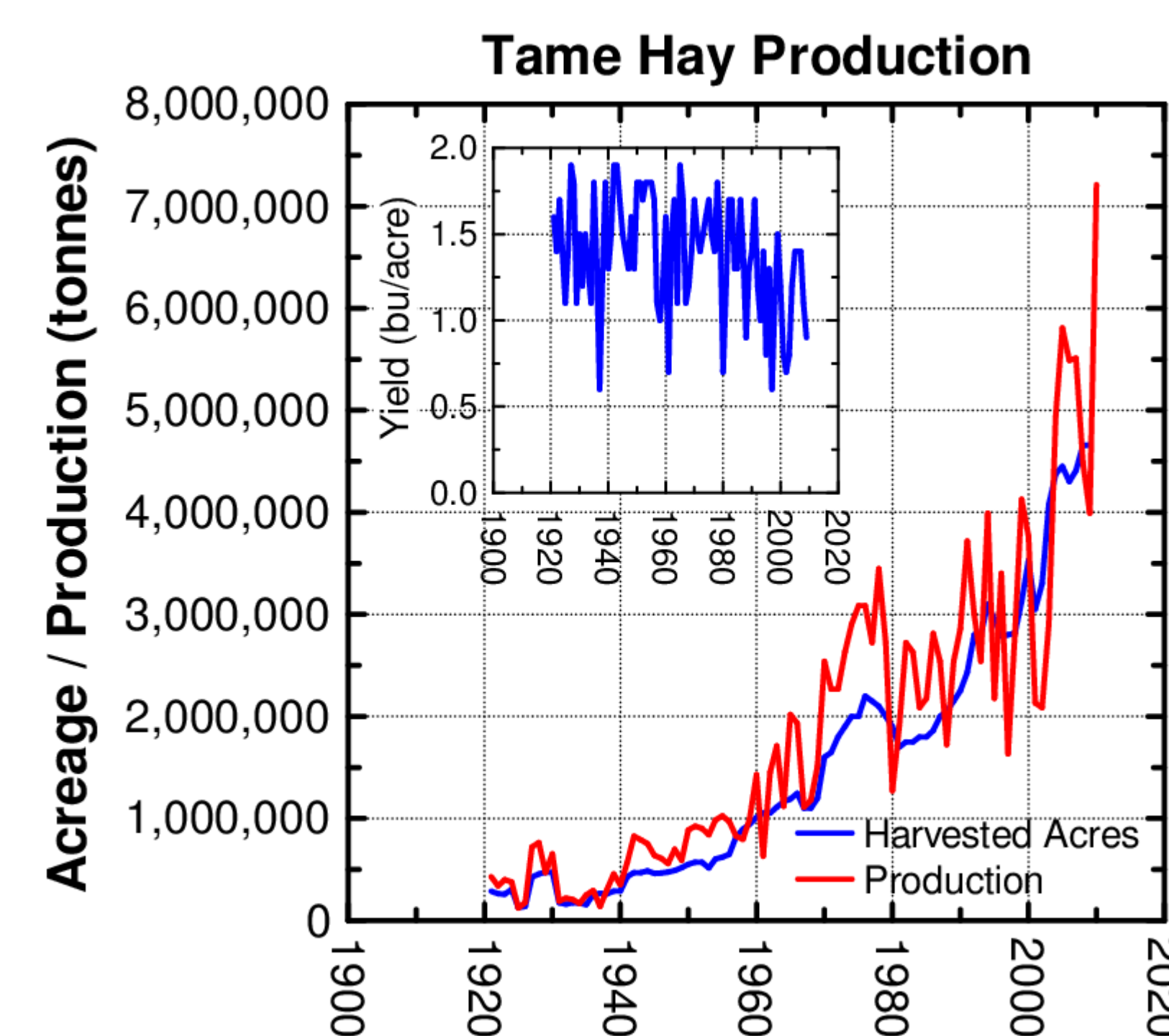


- flaxseed acreage/production was highly variable (and with no clear trend) between the 1900s and the late 1970s, and has since increased steadily
- yields declined steadily between the 1900s and the late 1930s, and have since increased steadily

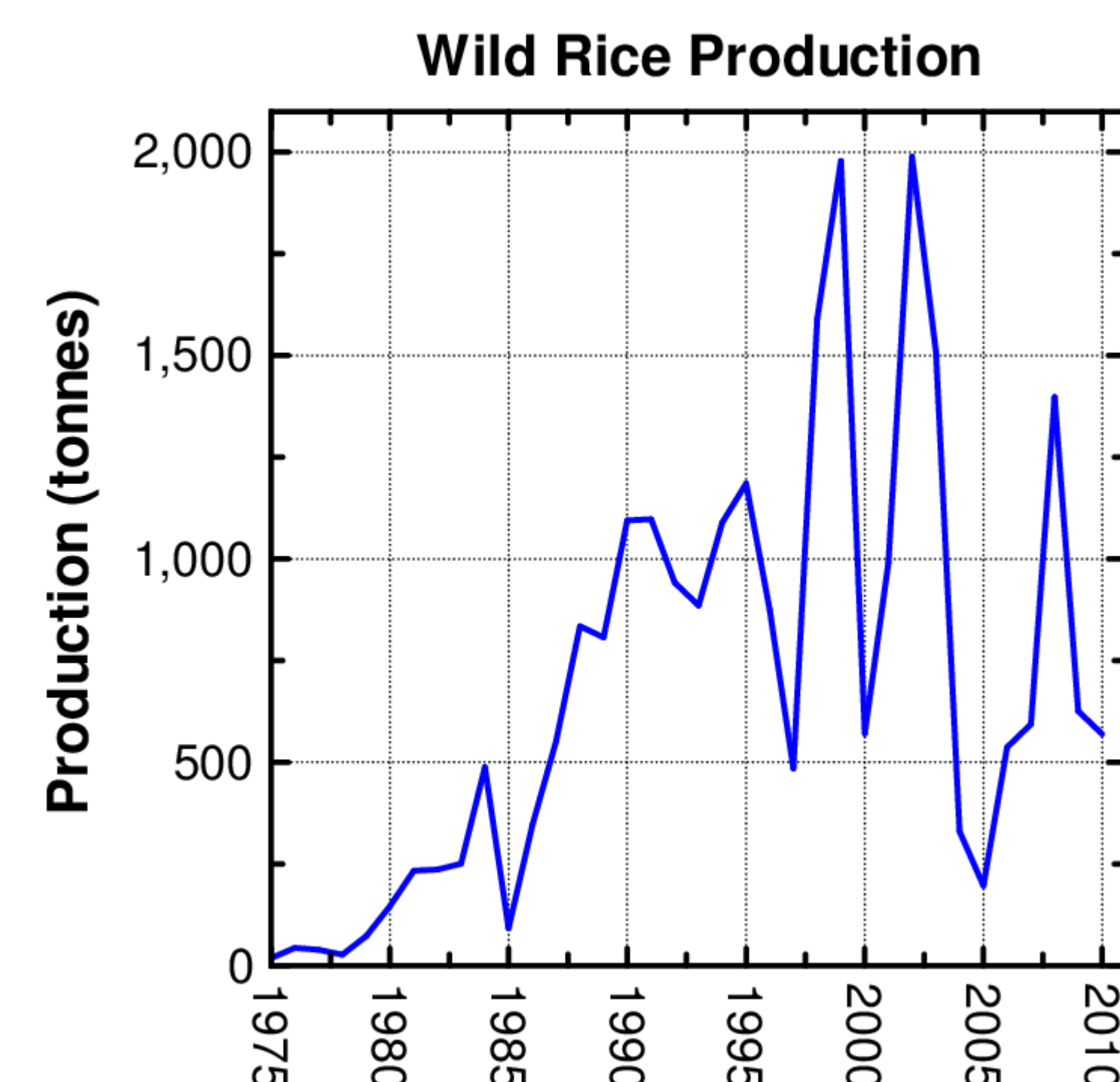


- canola acreage/production has been increasing steadily since the 1940s, as have yields

## Results and Discussion

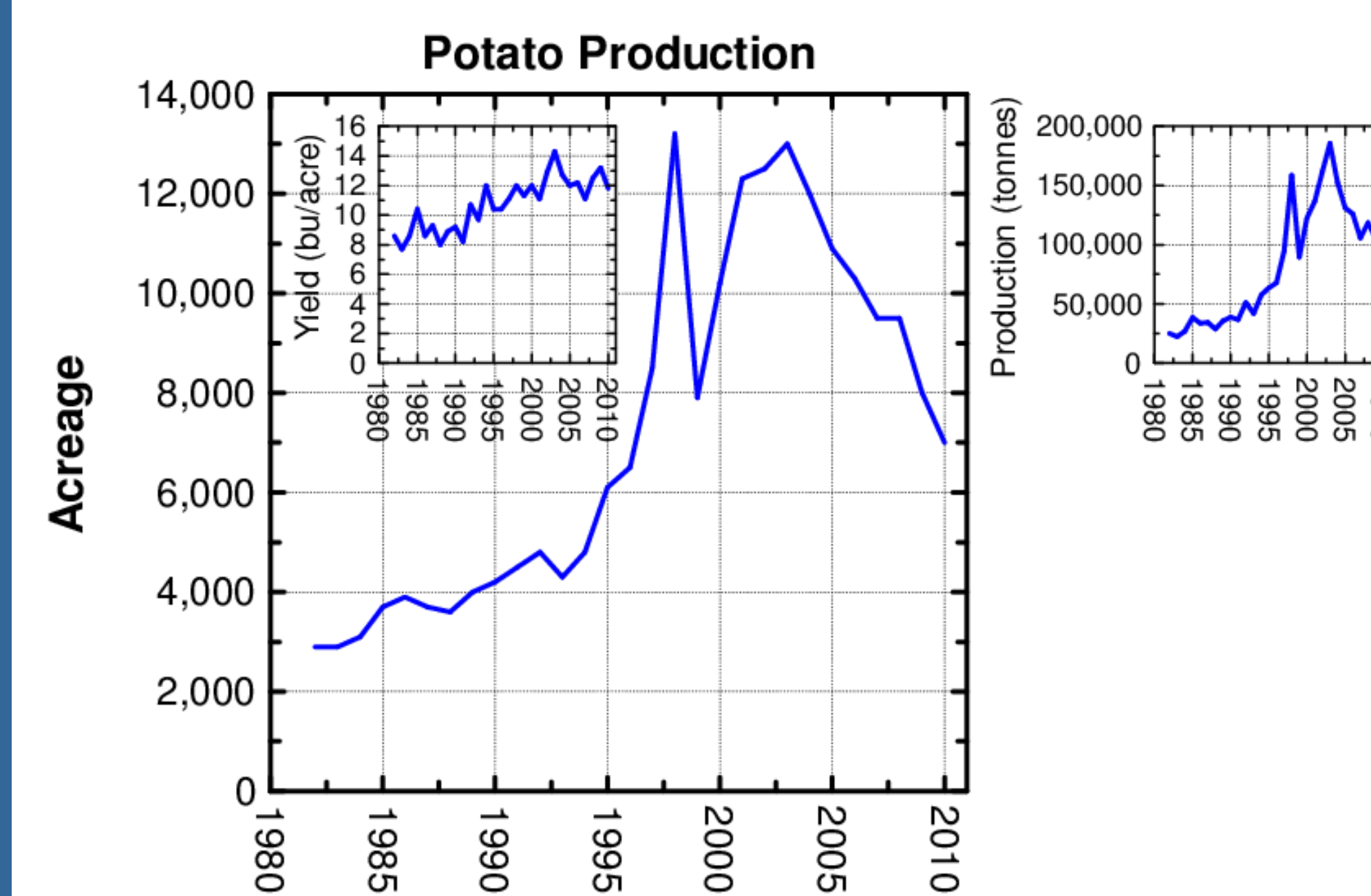


- tame hay acreage/production has been increasing steadily since the 1920s
- yields were stable between the 1920s and the early 1990s, and has since declined slightly

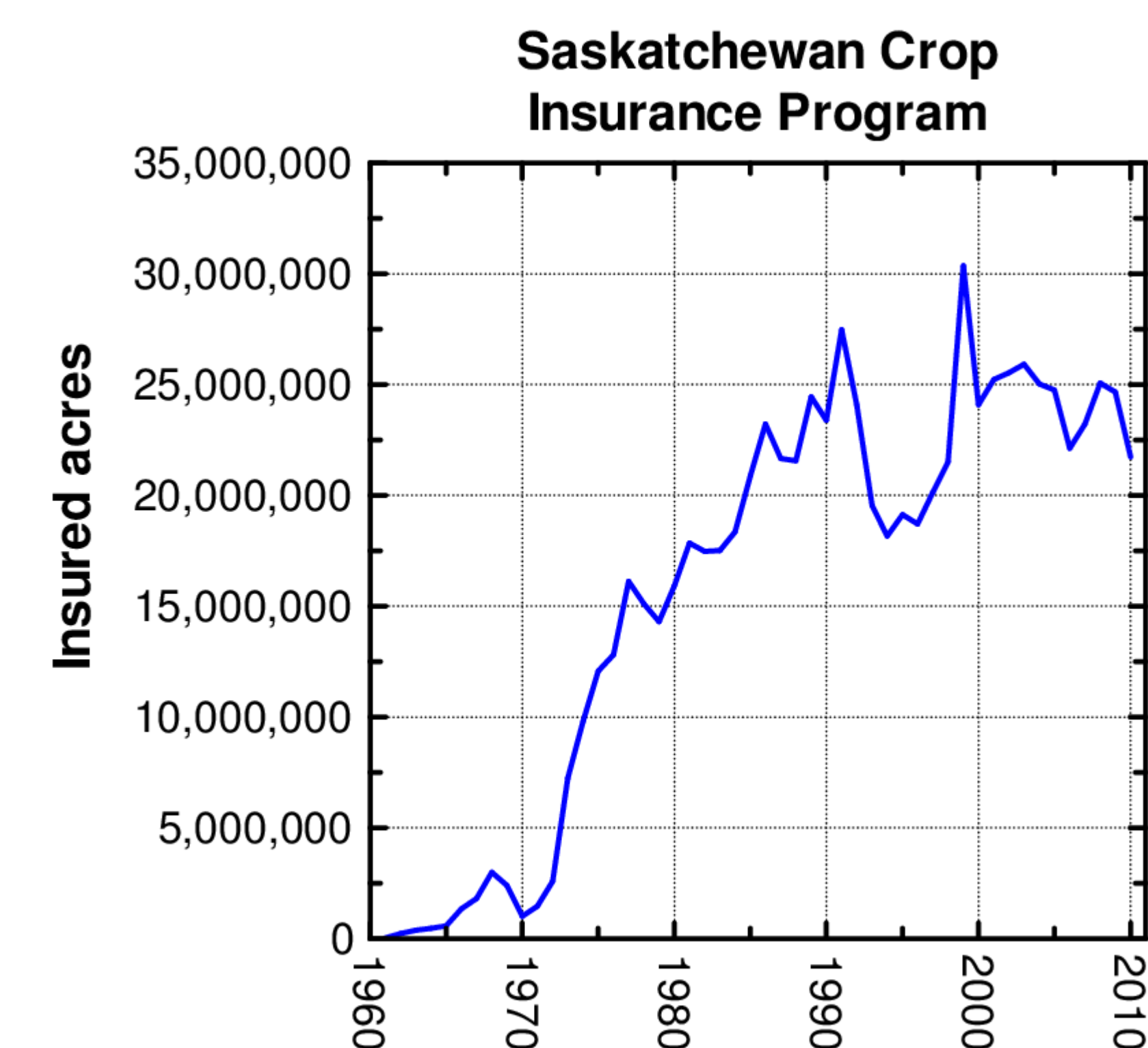


- wild rice production rose steadily from the mid-1970s to the mid-1990s, and has been approximately constant but highly variable since then

## Results and Discussion

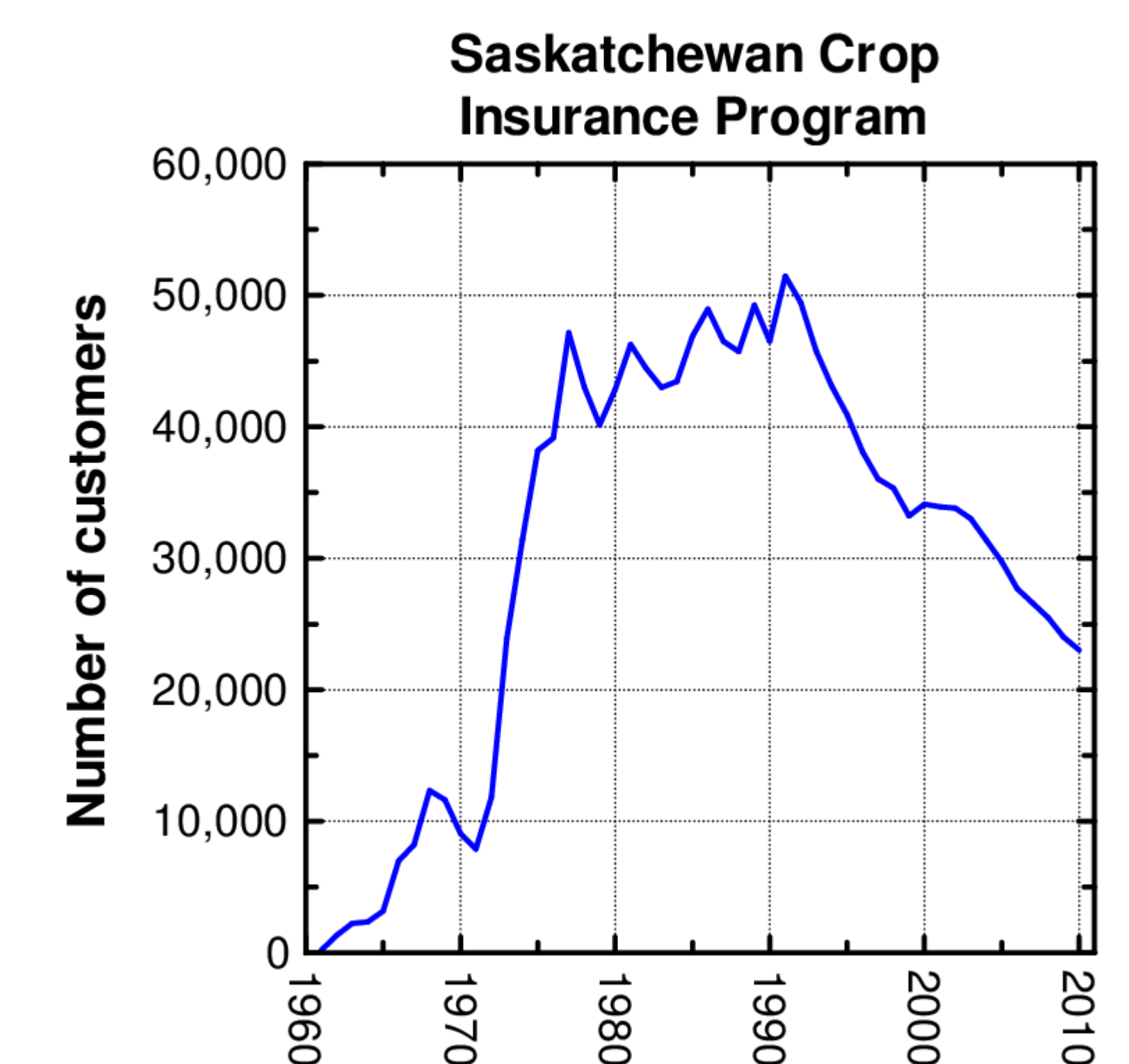


- potato acreage/production increased exponentially between the early 1980s and the early 2000s, and has since steadily declined
- yields have increased steadily since the early 1980s but have declined since the early 2000s

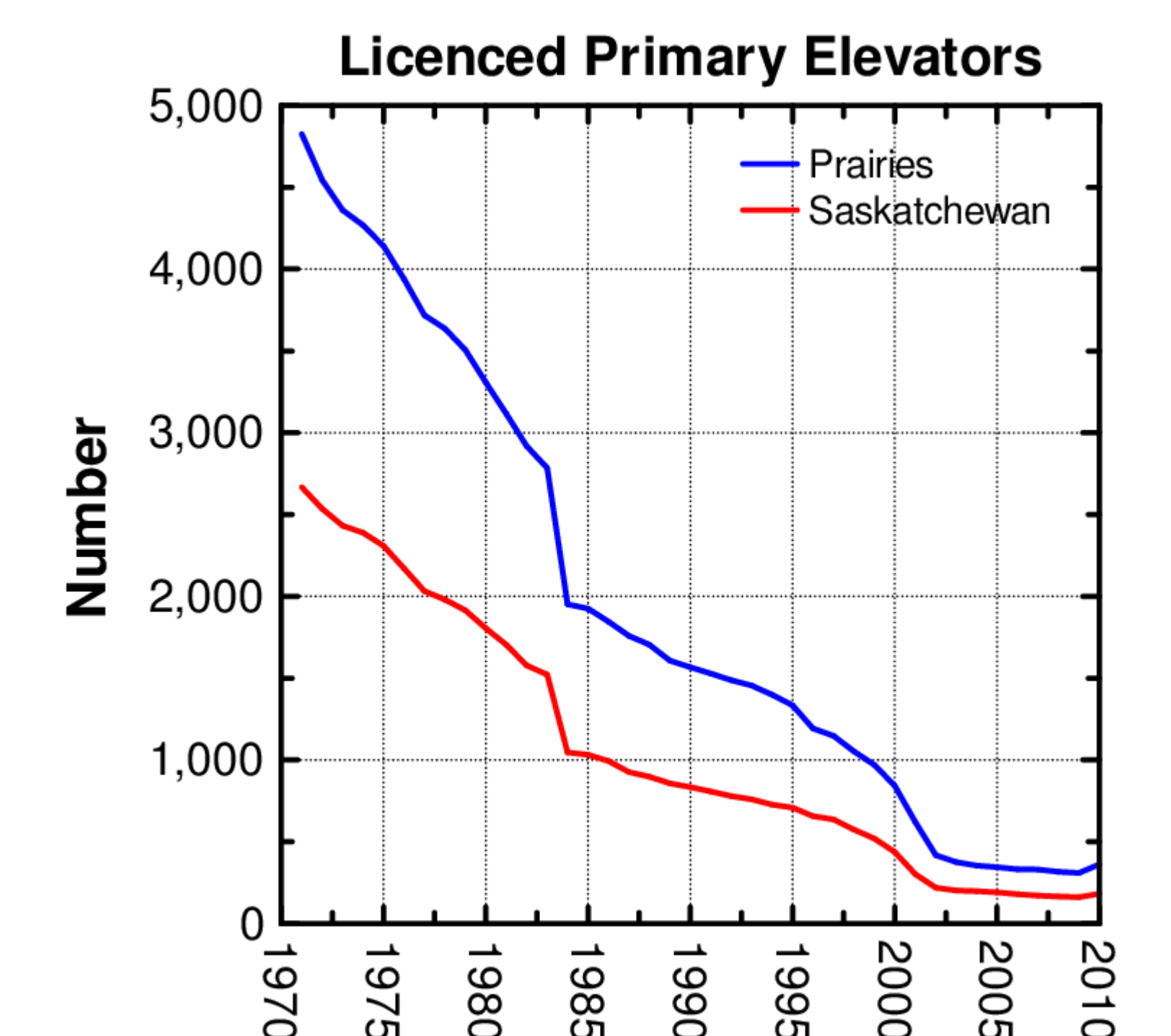


- number of insured acres increased slightly during the 1960s, increased rapidly during the 1970s and 1980s, and has since stabilized

## Results and Discussion



- number of crop insurance customers increased steadily during the 1960s, very rapidly during the first half of the 1970s, continued to increase at a slower rate until the early 1990s, and has since declined substantially and steadily to the present



- the number of licenced primary elevators on the prairies, and in Saskatchewan, declined steadily from the early 1970s to the mid-2000s, and has remained approximately stable over the past half-decade

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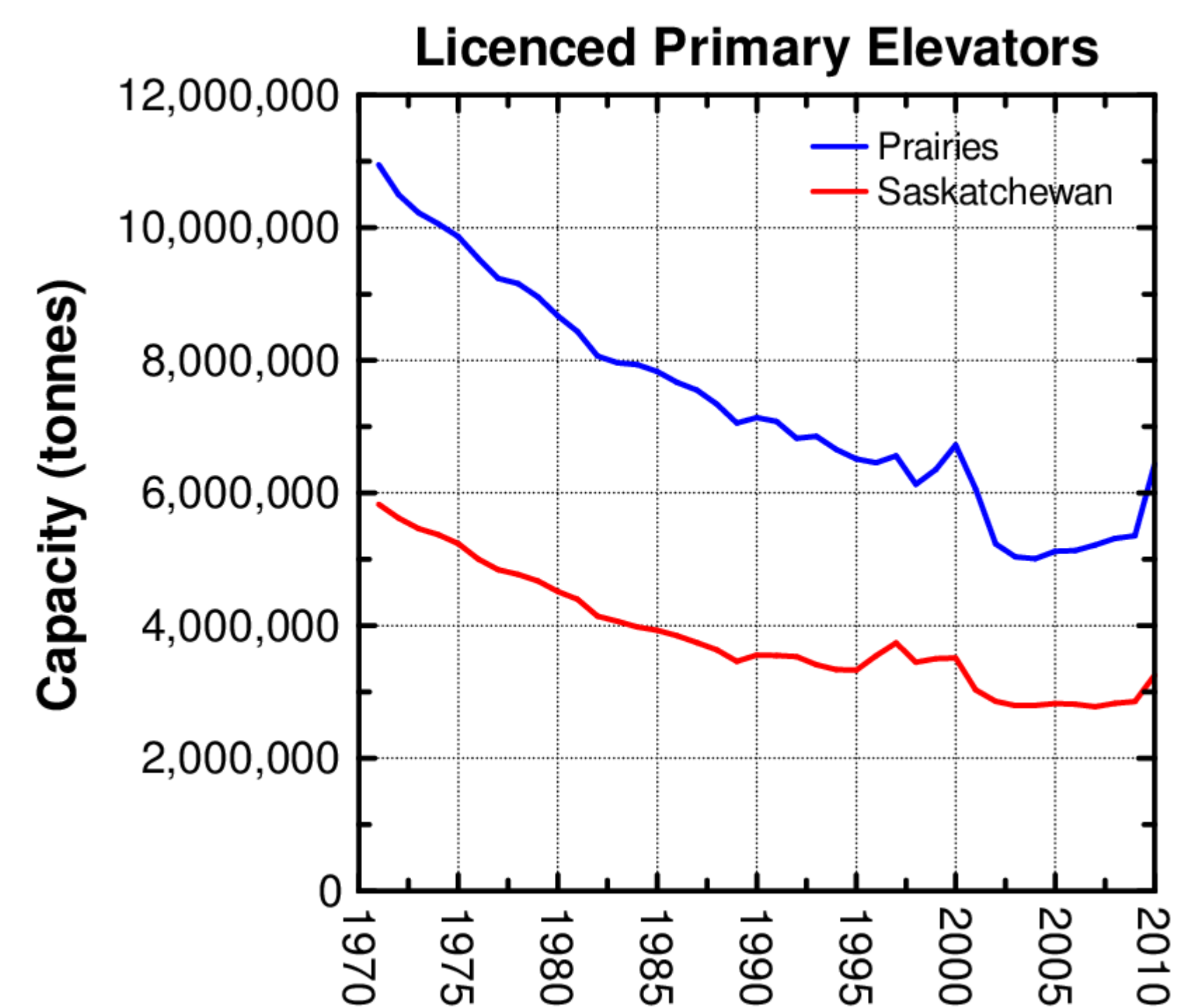


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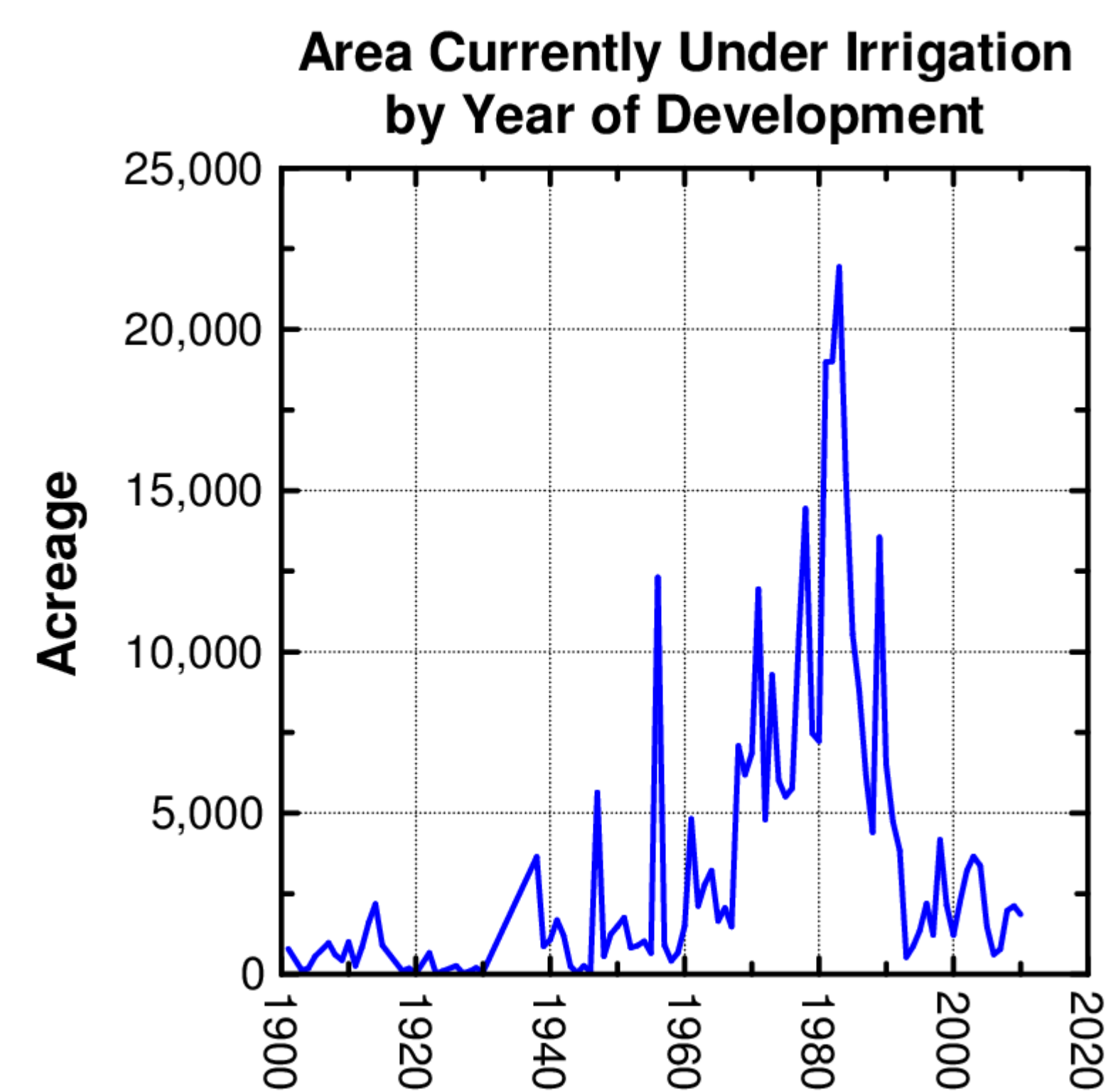
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## Results and Discussion



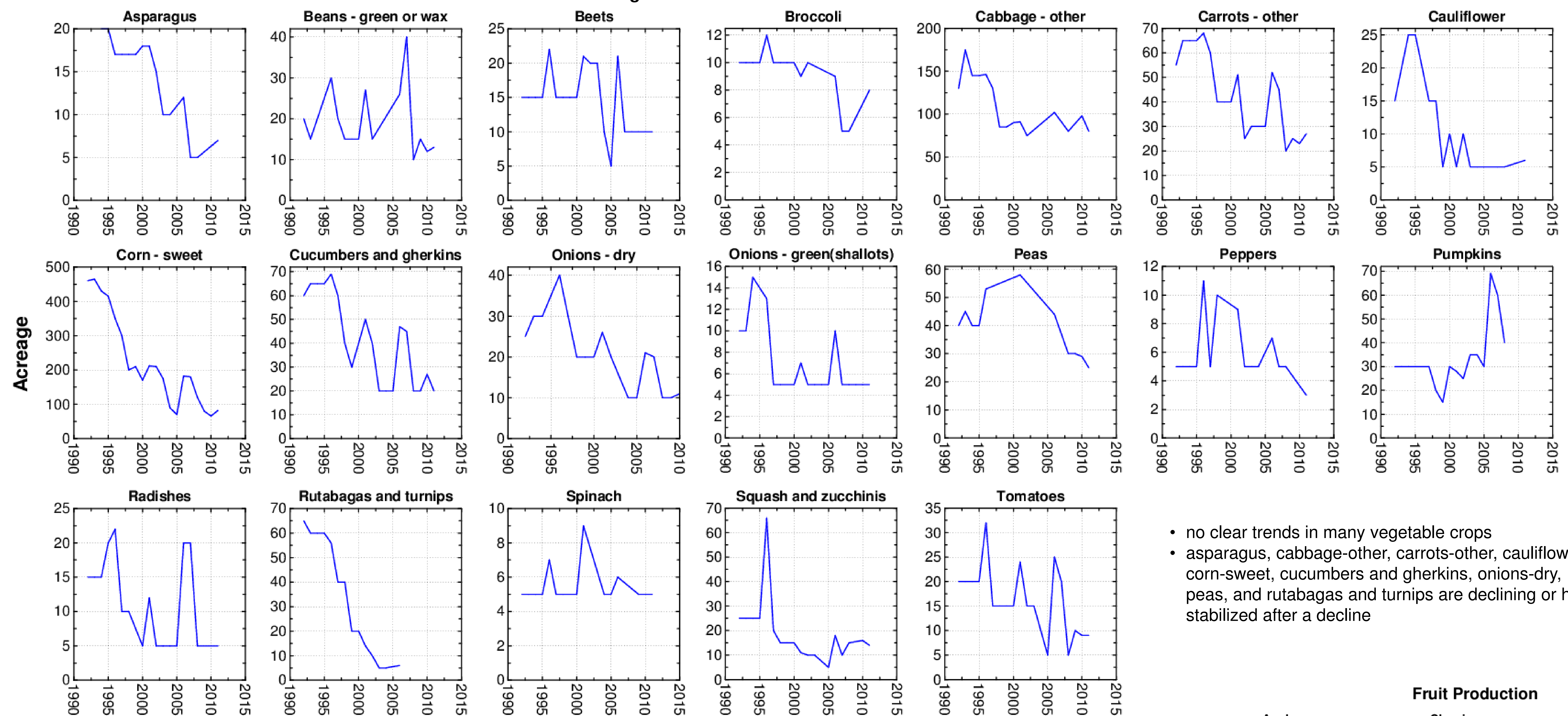
- the capacity of licensed primary elevators on the prairies, and in Saskatchewan, declined steadily from the early 1970s to the mid-2000s, and has remained approximately stable over the past half-decade (with evidence of a slight increase over the past couple years)



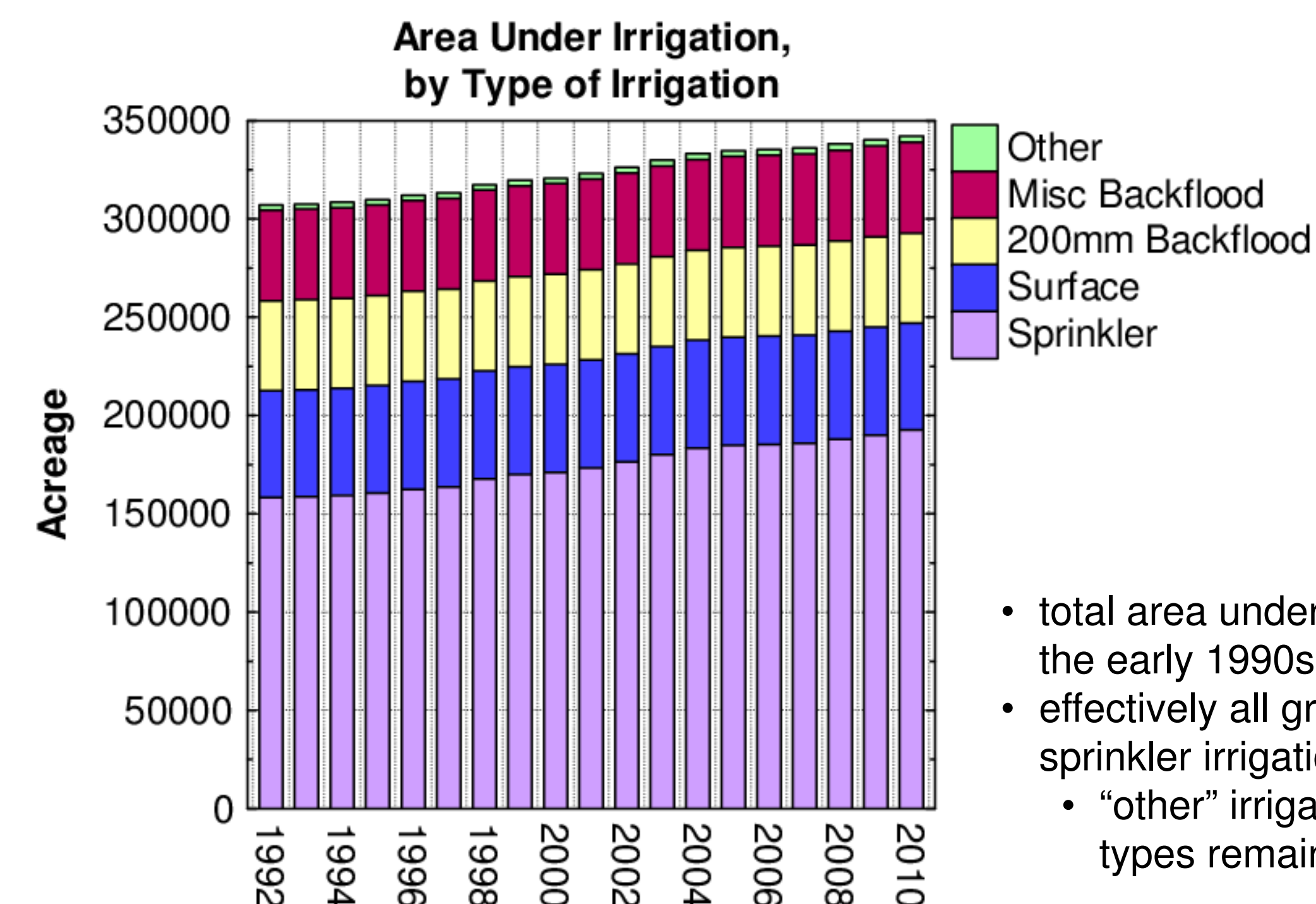
- most irrigation development (by area) occurred between the 1960s and late 1980s
- current irrigation development is near historic lows

## Results and Discussion

### Vegetable Production



- no clear trends in many vegetable crops
- asparagus, cabbage-other, carrots-other, cauliflower, corn-sweet, cucumbers and gherkins, onions-dry, peas, and rutabagas and turnips are declining or have stabilized after a decline



- total area under irrigation has increased slightly since the early 1990s
- effectively all growth over this time has been via sprinkler irrigation
  - "other" irrigation acreage grew slightly, but all other types remained constant

- no clear time trend for raspberry acreage
- acreage for sour cherries and saskatoon berries increased until about 2005, and has since stabilized
- strawberry production increased slightly during the early 1990s, then declined until the mid-2000s, and has since stabilized
- production trends for apples and plums/prunes has been erratic
  - acreage for these crops increased until the early 2000s, and has since either declined sharply (plums and prunes) or stabilized with high year-to-year variability (apples)

### Fruit Production

