

Hunter Declines in North America and Europe: Causes, Concerns and Proposed Research

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Antihunting Attitudes of the General Public—The big threat?

- Hunters tend to believe that the general public ...
 - dislikes hunting and hunters
 - and this negative attitude is increasing

And will lead to the end of hunting

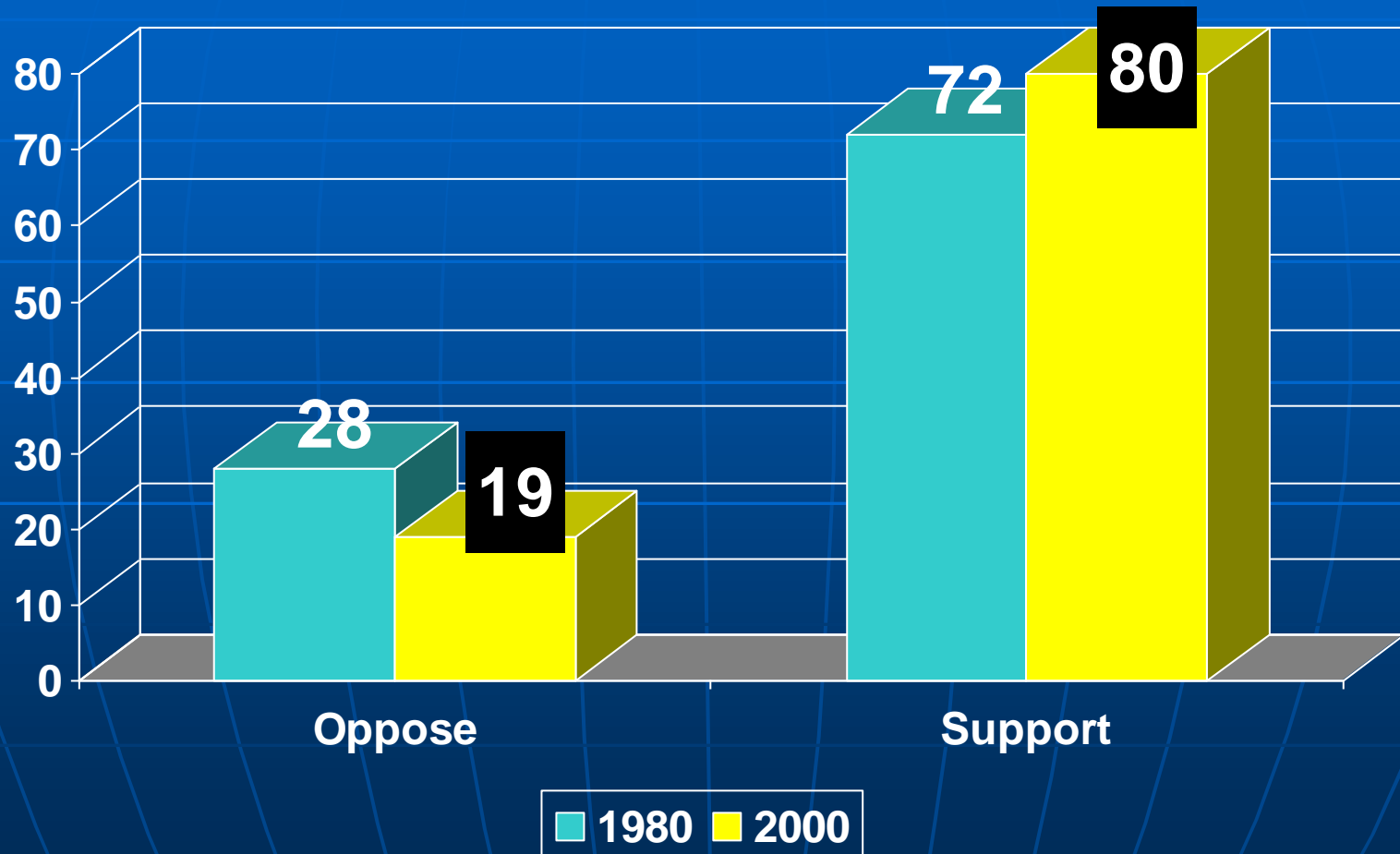
- But the data that we and others have collected
 - Show High levels of support for hunting in general and for hunting that involves food

Support for Hunting

- Over 90% showed support for some kind of hunting our 1996 survey in Sweden and in the US
- We found an increase in support for hunting in US in 1996 using exactly the same question that Kellert used in 1975.

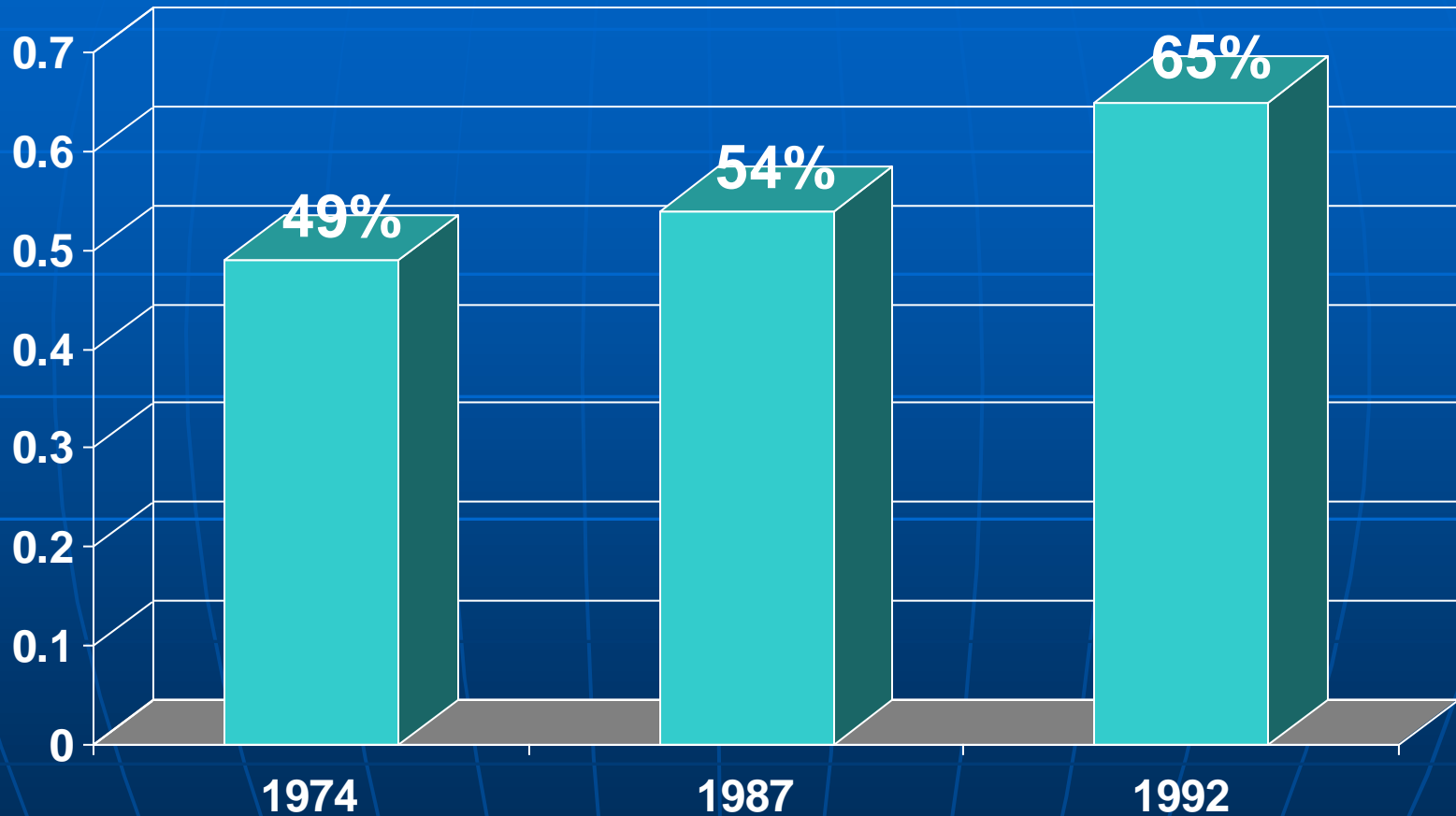
Heberlein, T. A. and Tomas Willebrand. 1998 "Attitudes Toward Hunting Across Time and Continents: the United States and Sweden." Game and Wildlife Vol. 15. P1071-1080..

Support for Hunting in Sweden increased between 1980 and 2000



Data Presented at the 2003 Congress of the IUGB in Portugal

Increased Support for Deer Hunting in New Jersey



Research done by James Applegate

Yes

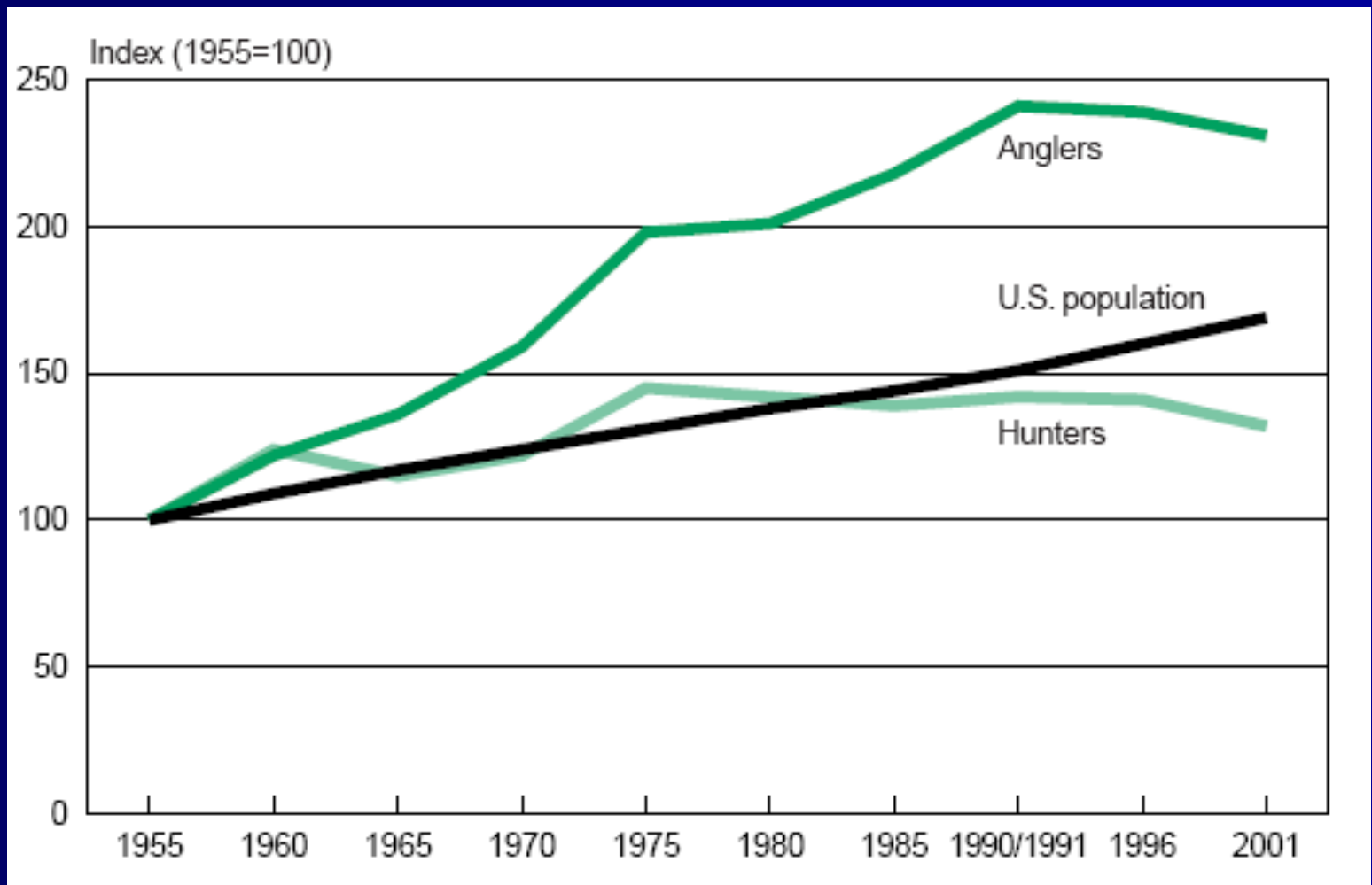
- Negative attitudes and activism about specific kinds of hunting in specific places can lead to ban—for example
 - Trapping in Colorado
 - Fox hunting in the UK
- BUT
 - The focus on attitudes (**which we can seldom change**), and which are generally positive **keeps us from dealing with the REAL threats to the future of hunting**

Declining Hunter Numbers

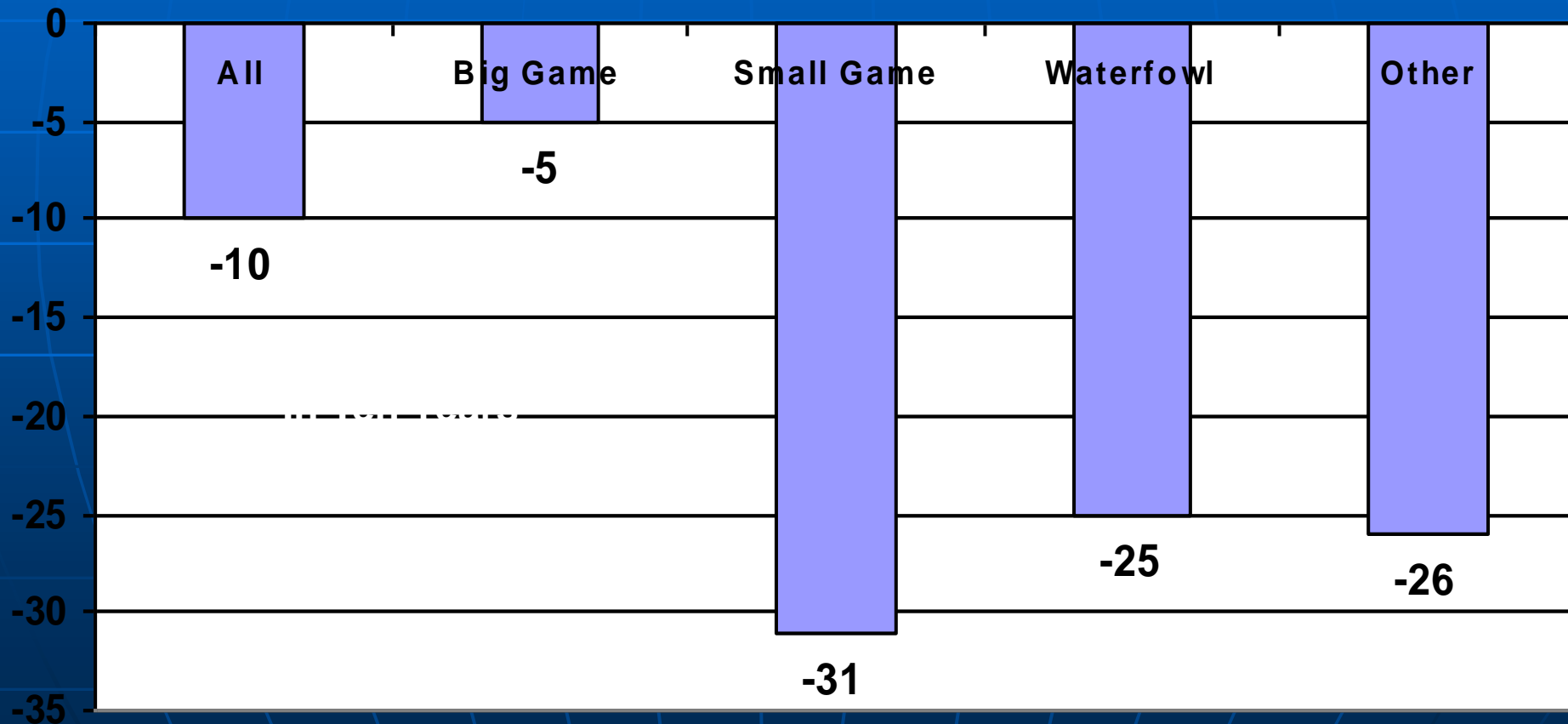
Aging Hunter Populations

Declining Recruitment

The United States



Percent Decline in US Hunter Numbers 1996-2006





State of Virginia 1995-2005

- License sales decreased by 105,000
13% Decrease
- At the same time the number of people **increased** by nearly a million to 7.6 million
- Percent of the population that holds a hunting license dropped from 12.2% to 9.3% (Still very high compared to Europe)

British Columbia Canada

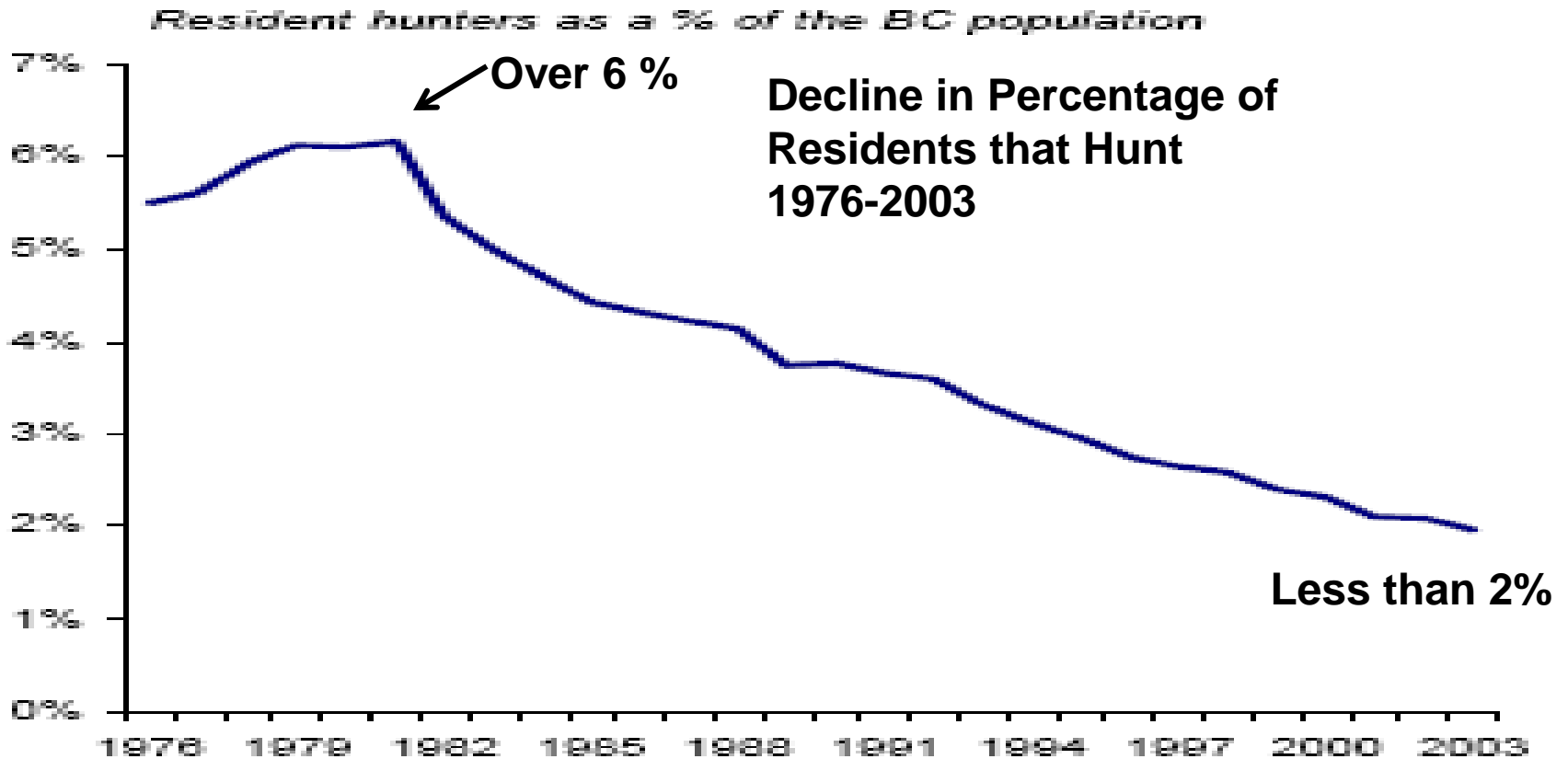
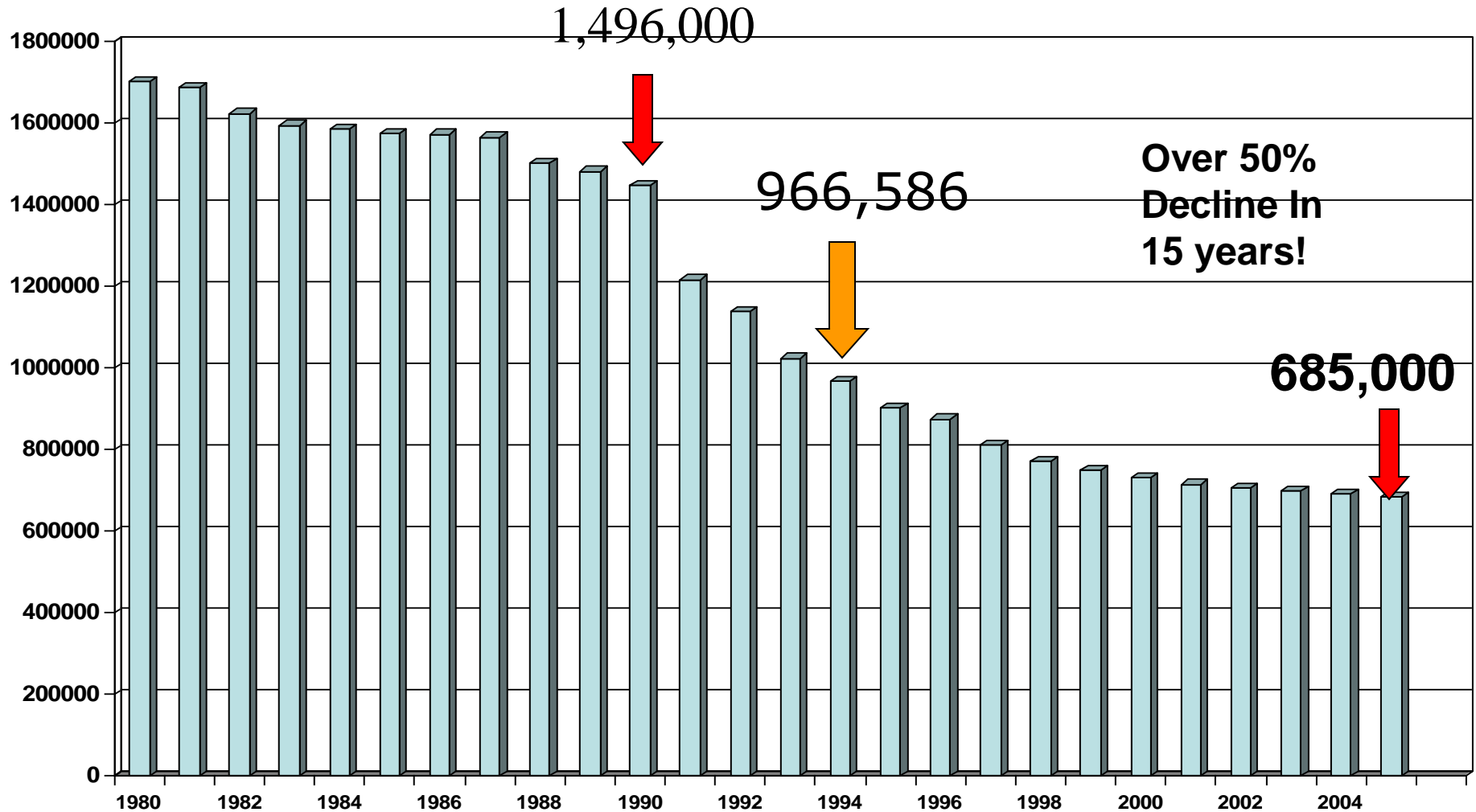


Figure 2
Source: BC Stats

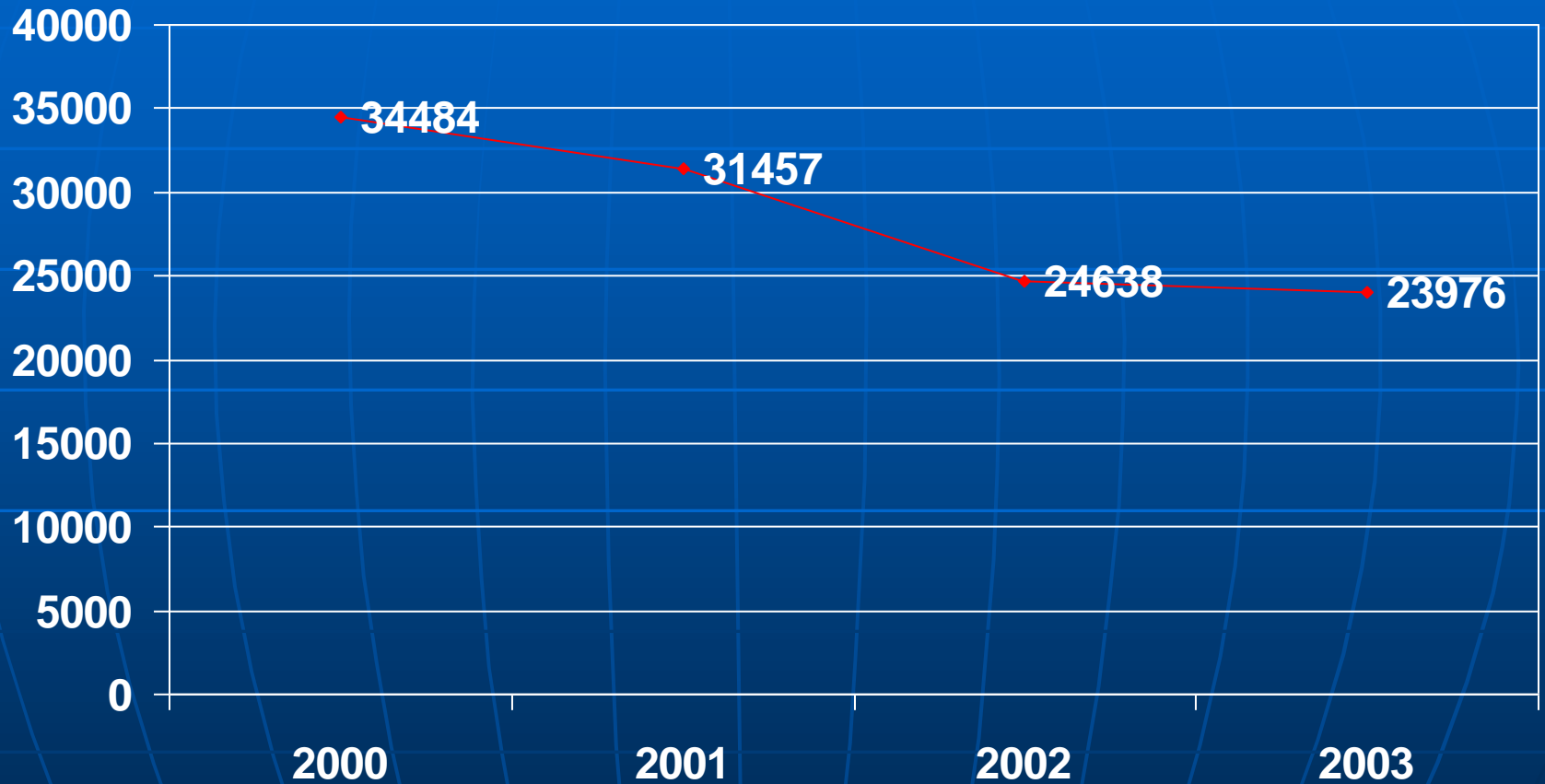
Number of Italian Hunters

(about 1.1% of Total Population)

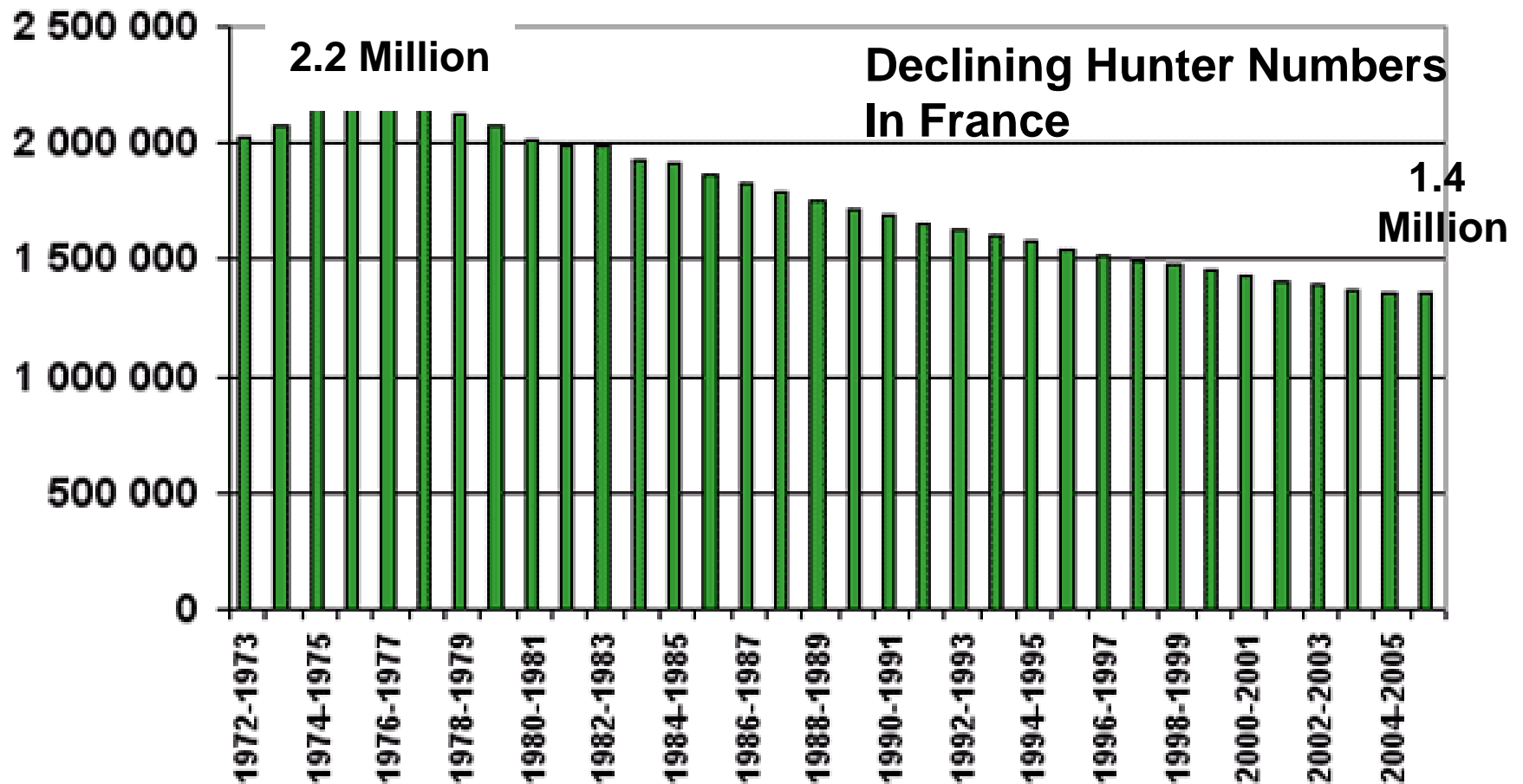


Piedmont Region in N Italy

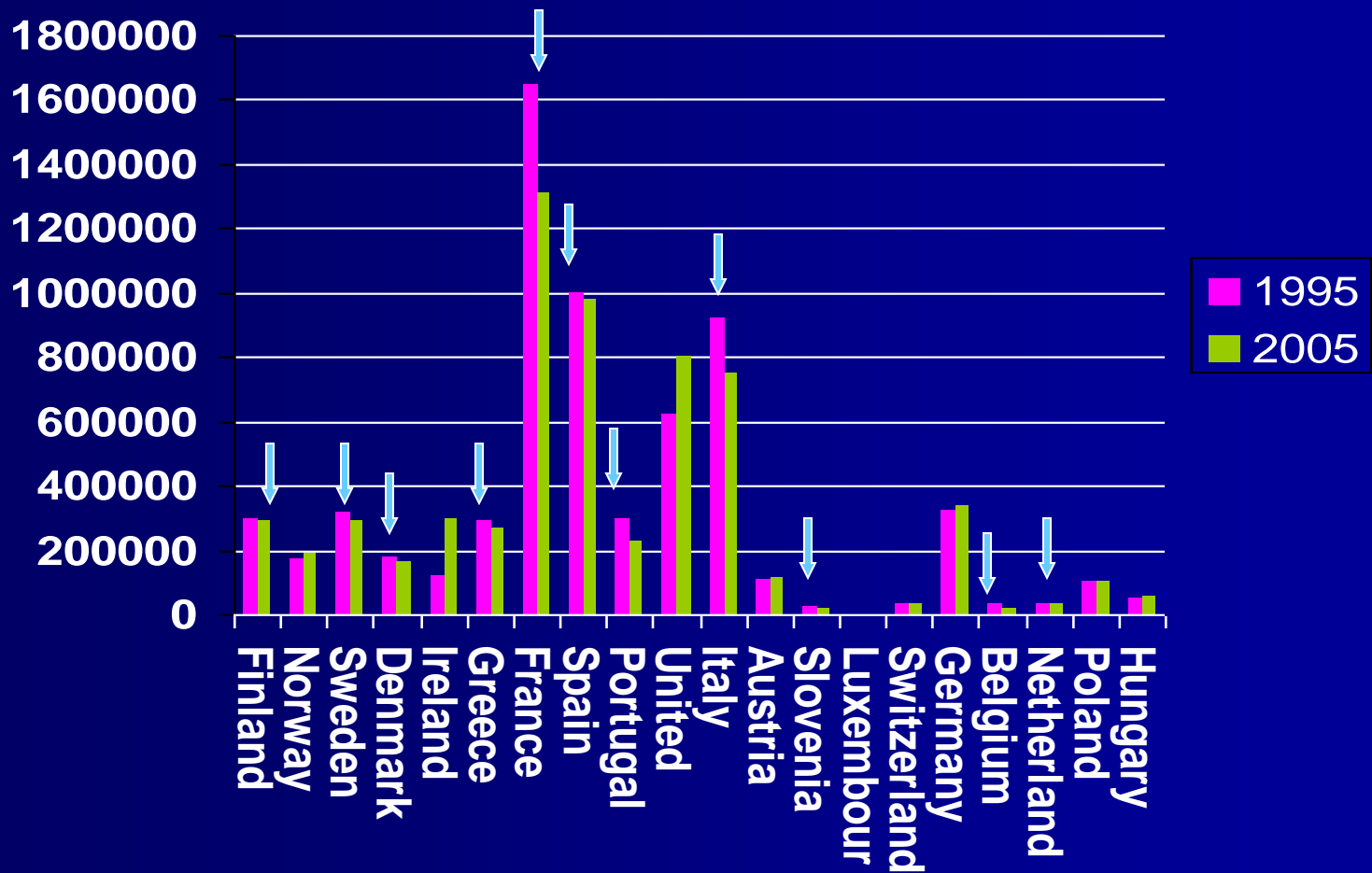
(Population 429,000—5.5% are hunters)



Nombre de validations du permis de chasser

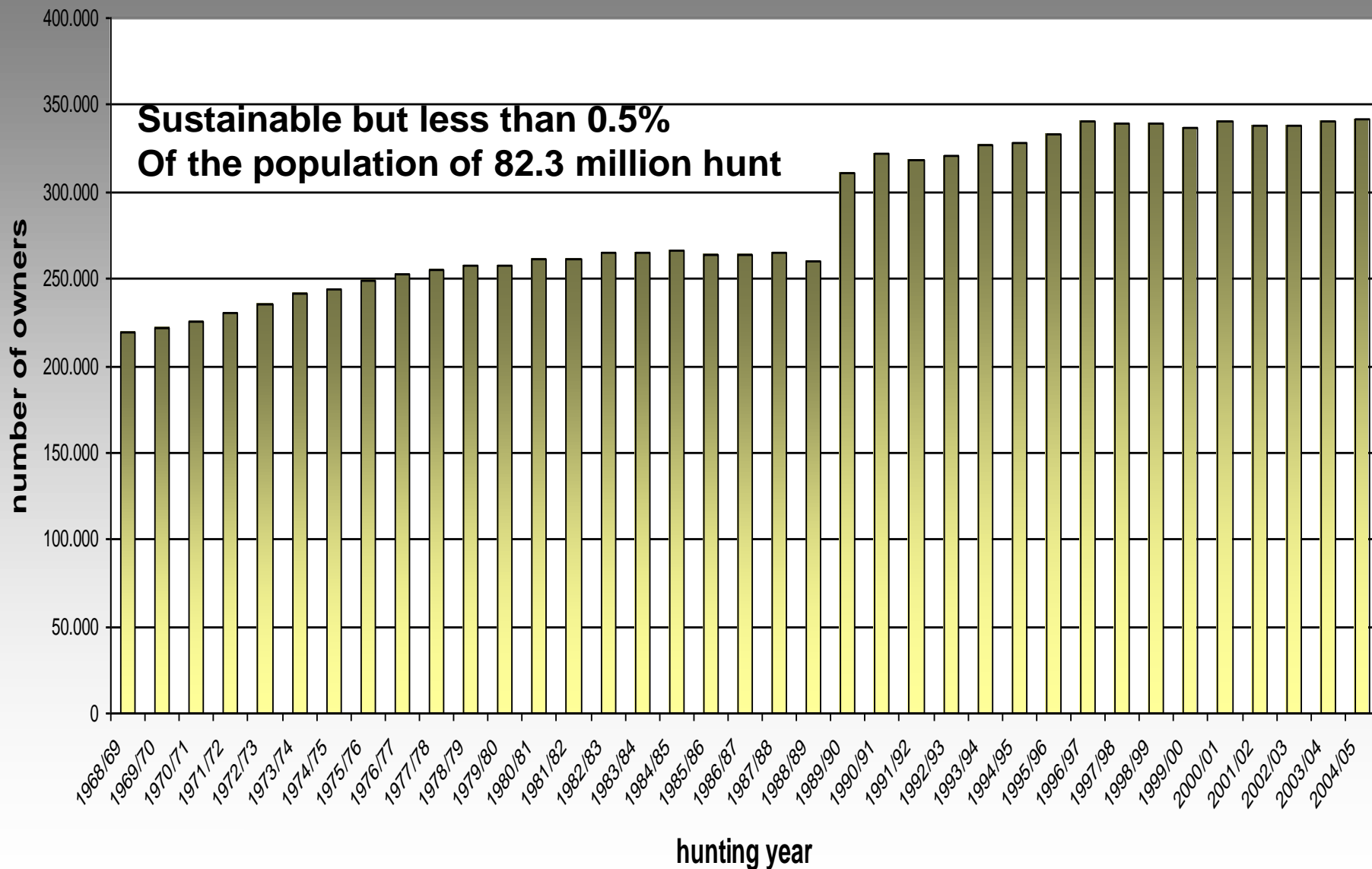


Hunters in Europe



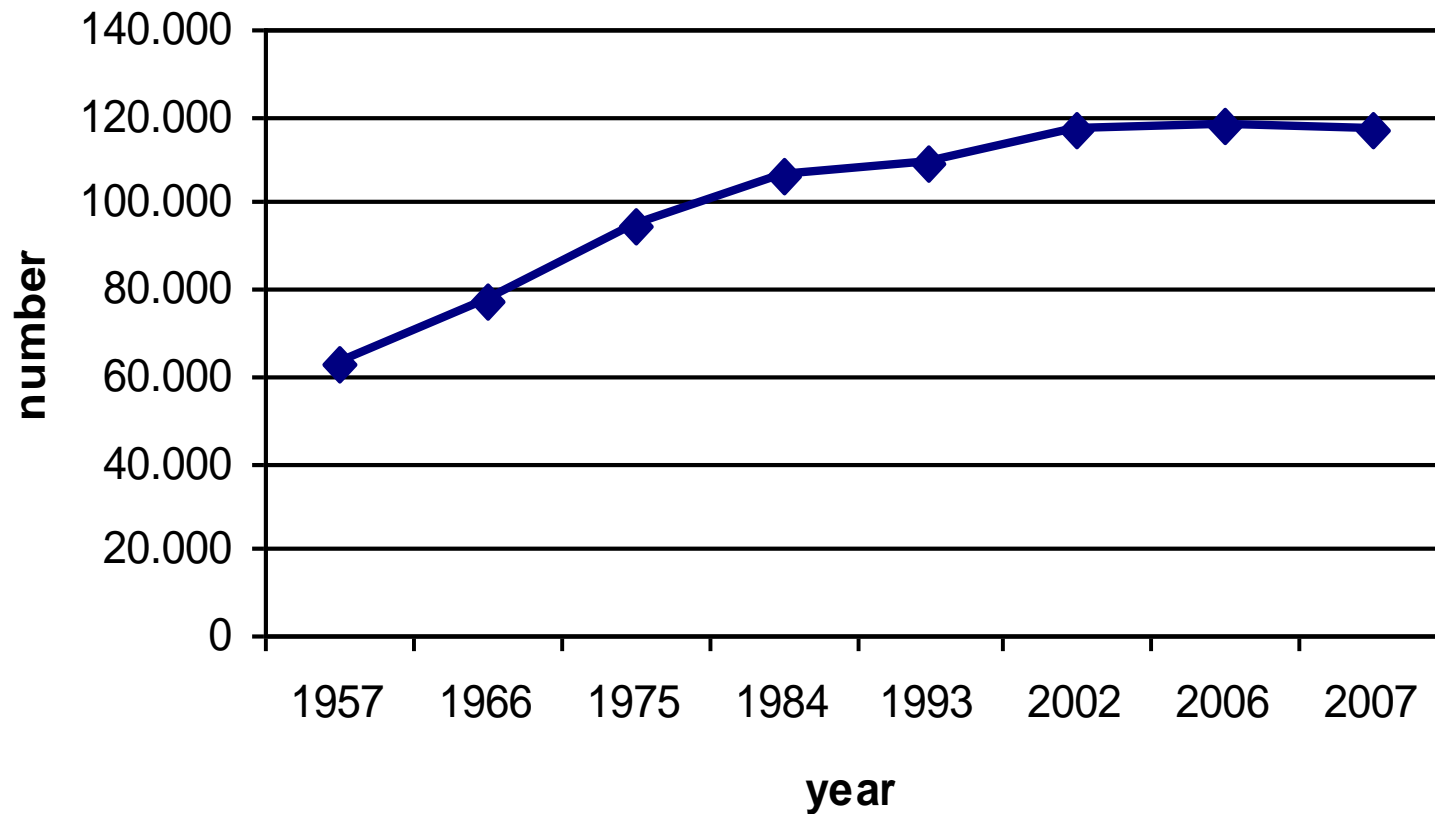
Owners of the hunting license in Germany

Sustainable but less than 0.5%
Of the population of 82.3 million hunt



Austria 1957-2007

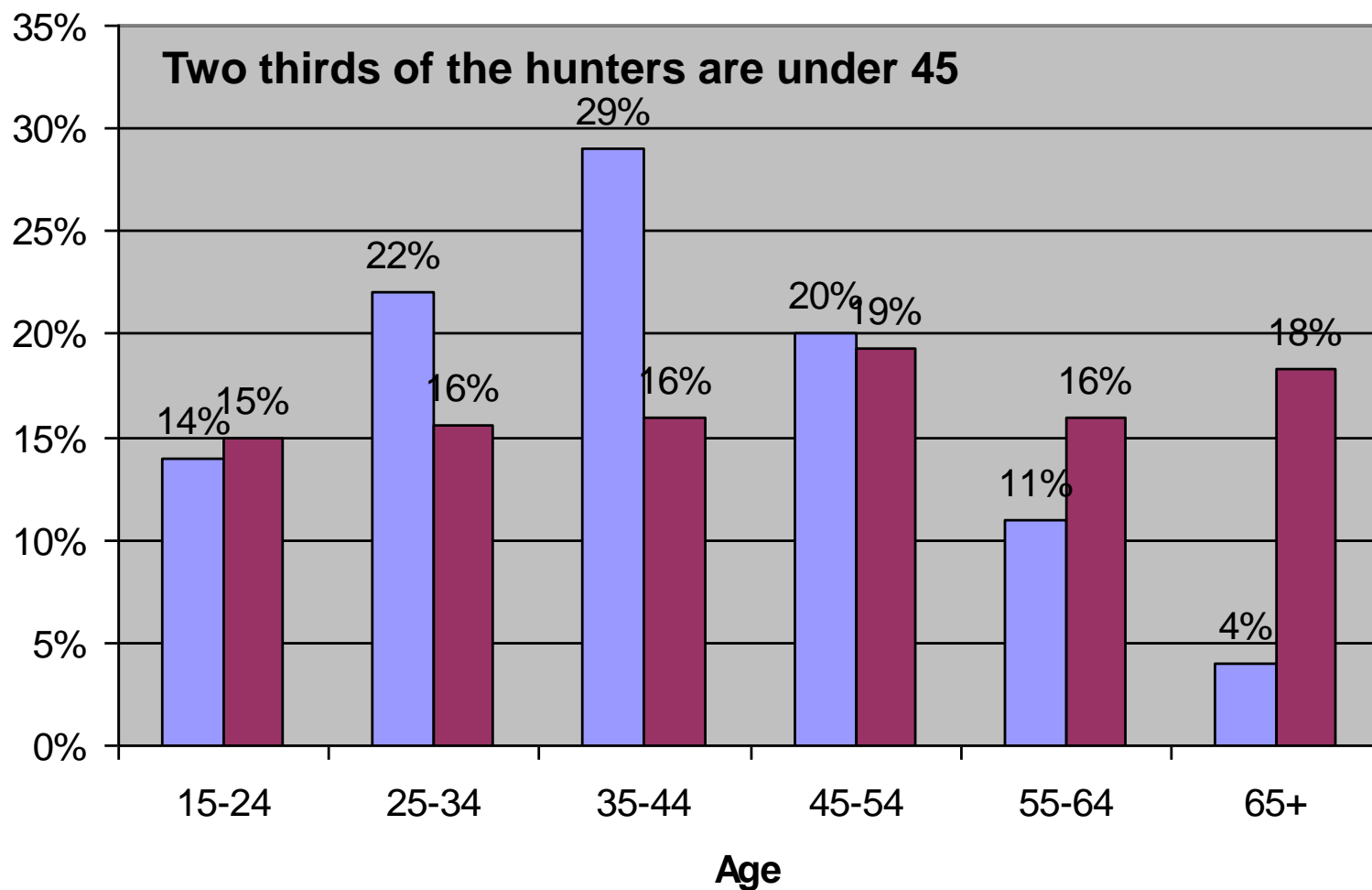
hunting licences in austria



Second Concern: Aging Hunter Populations

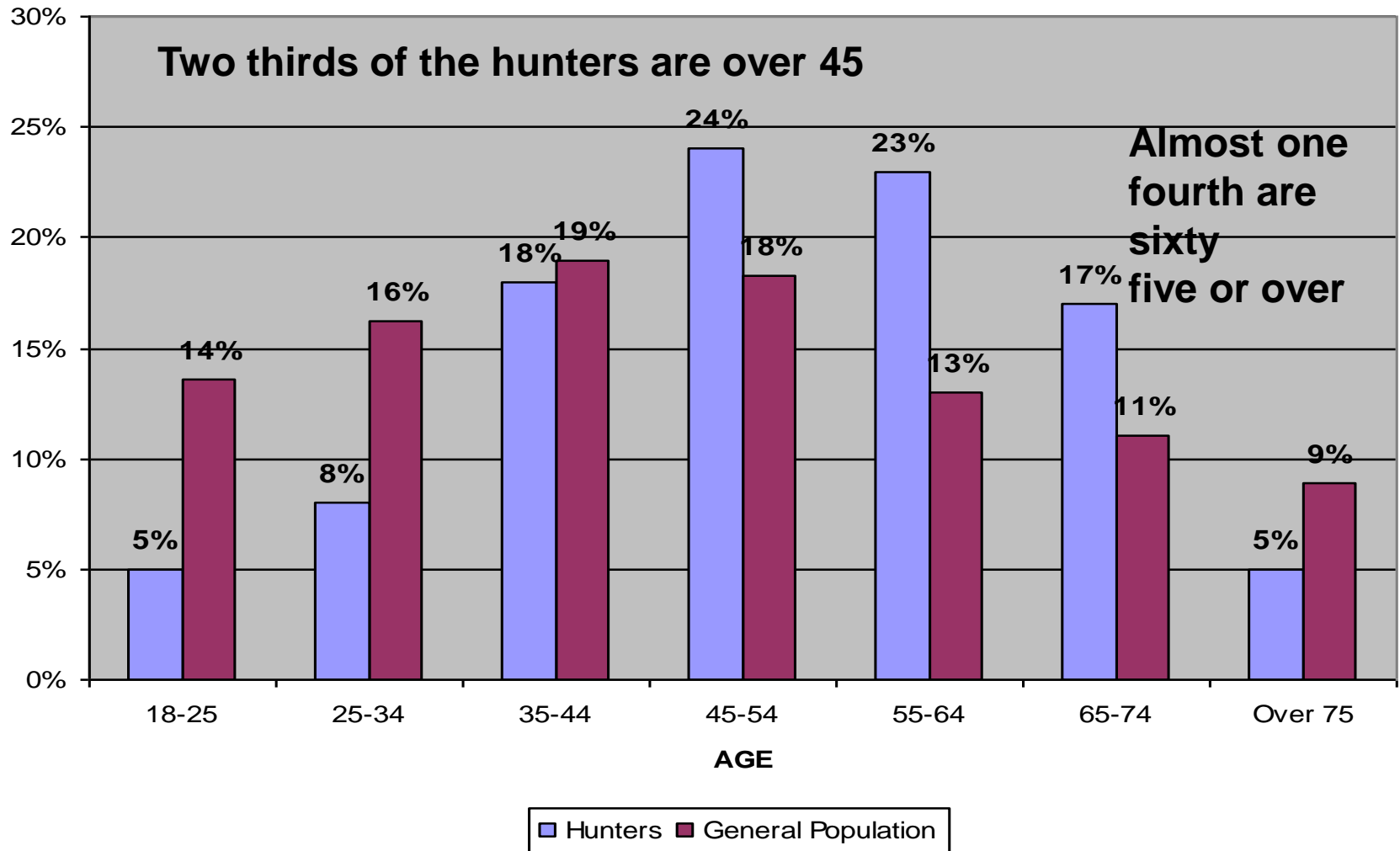
- Existing hunter populations appear to be much older than the general population
- What effect will the age distribution have on the near term future of hunting?

Qubec Desirable Population Distribution

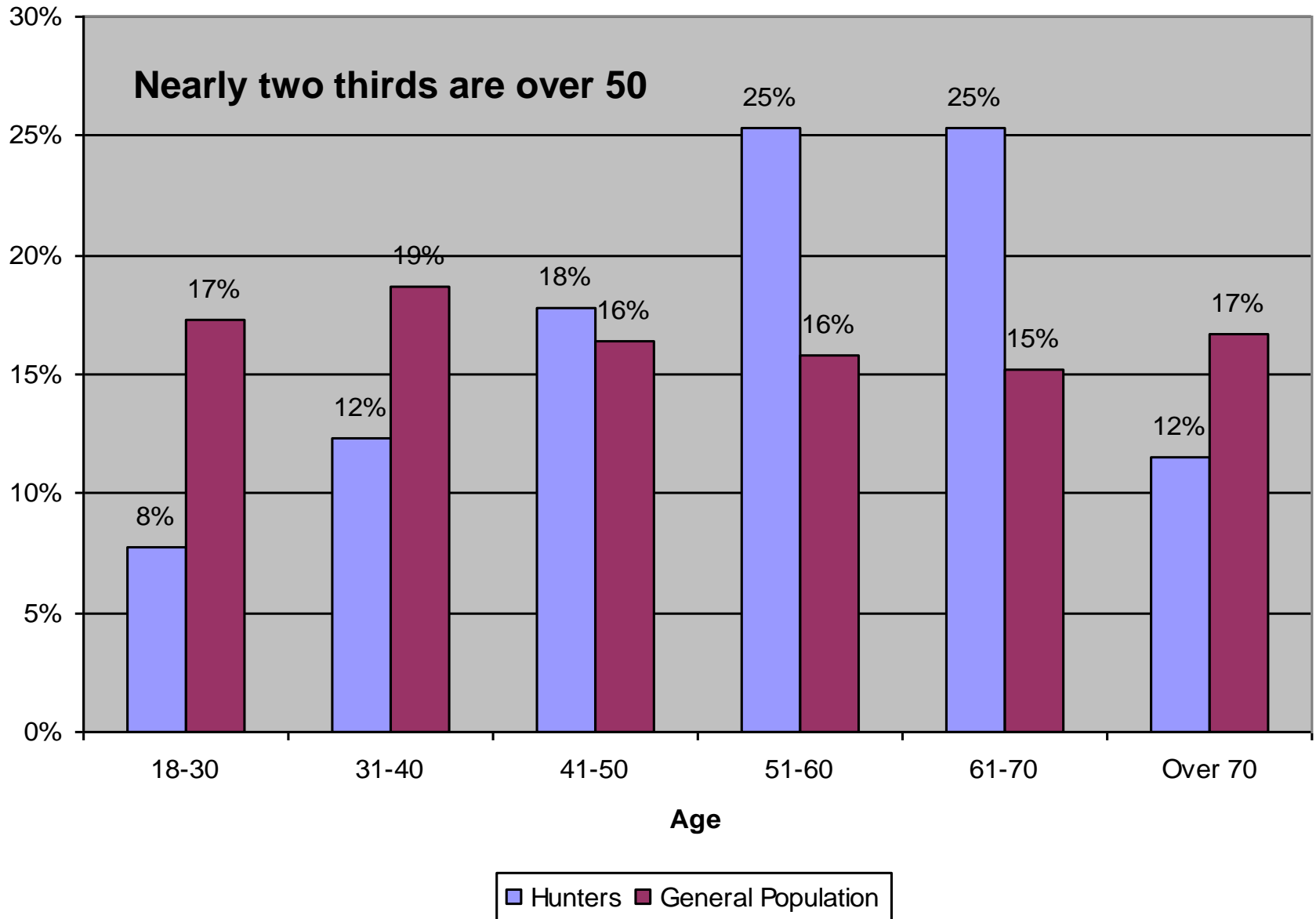


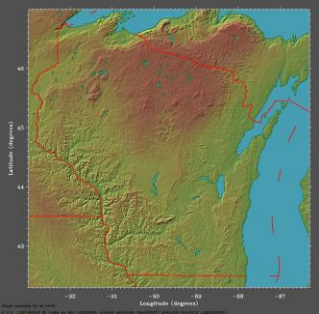
■ Hunters ■ General Population

FRANCE



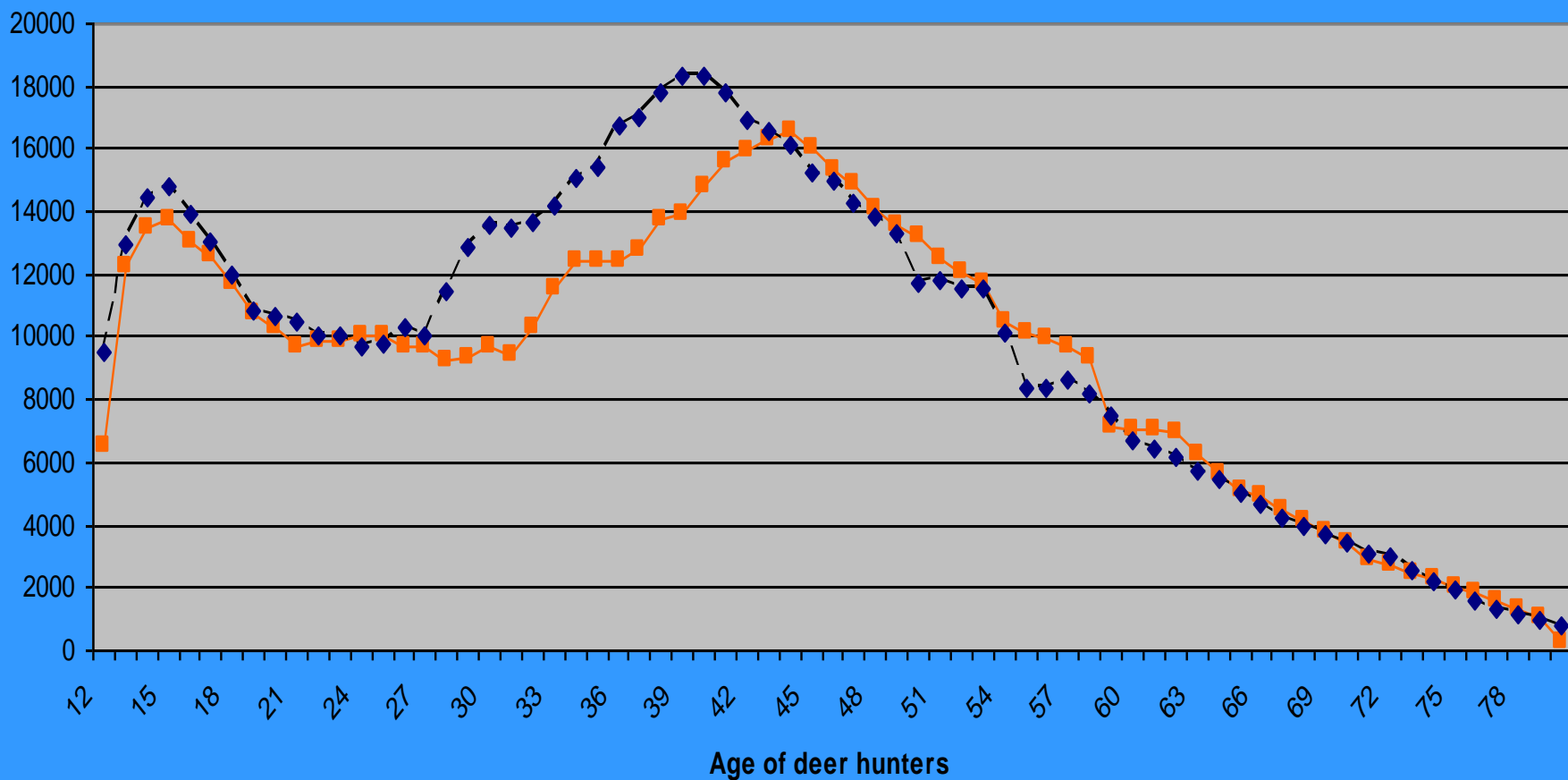
Piedmont (Italy)





Age distribution of Wisconsin deer hunters - 2004

2004 — 2000



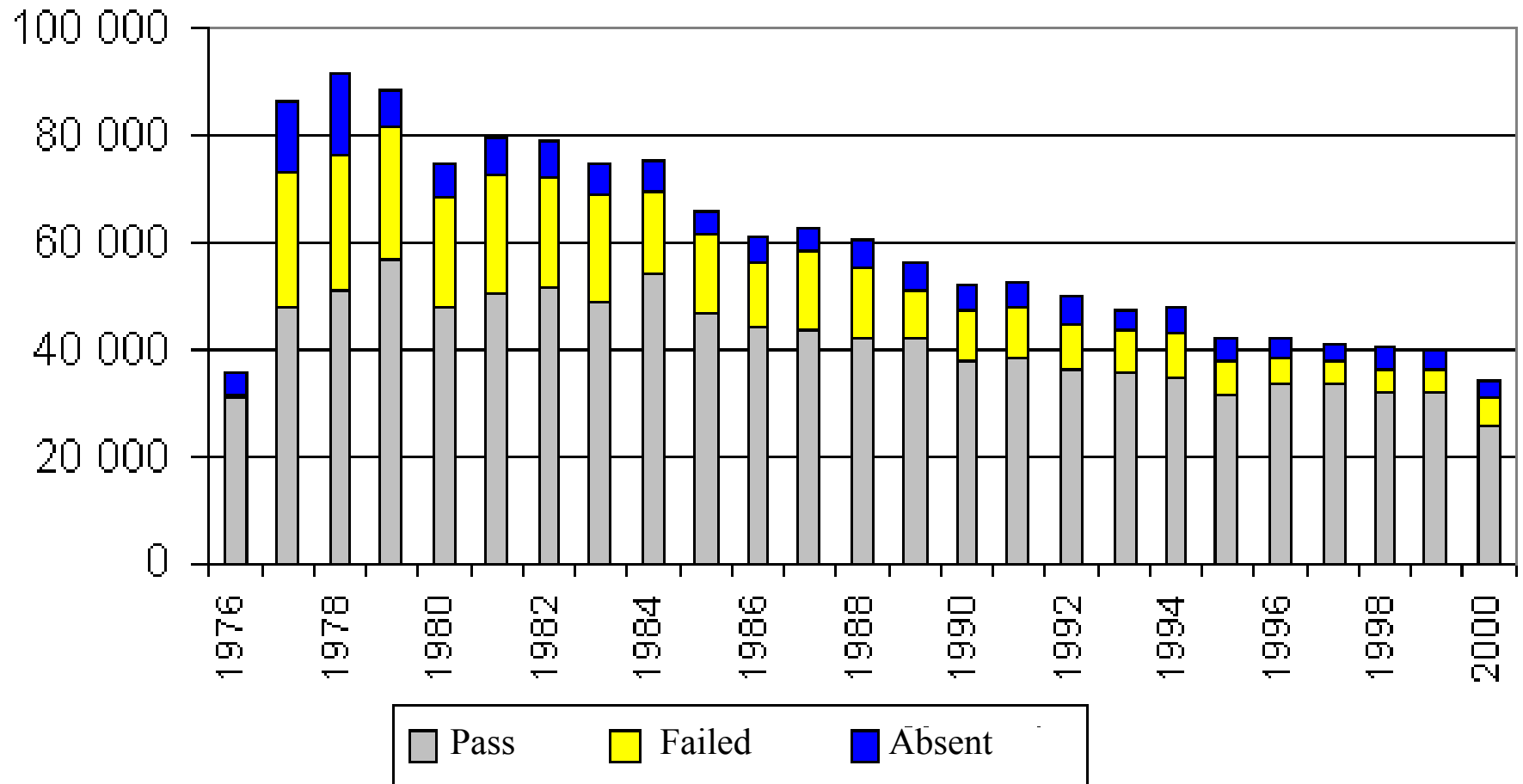


Hunting Recruitment

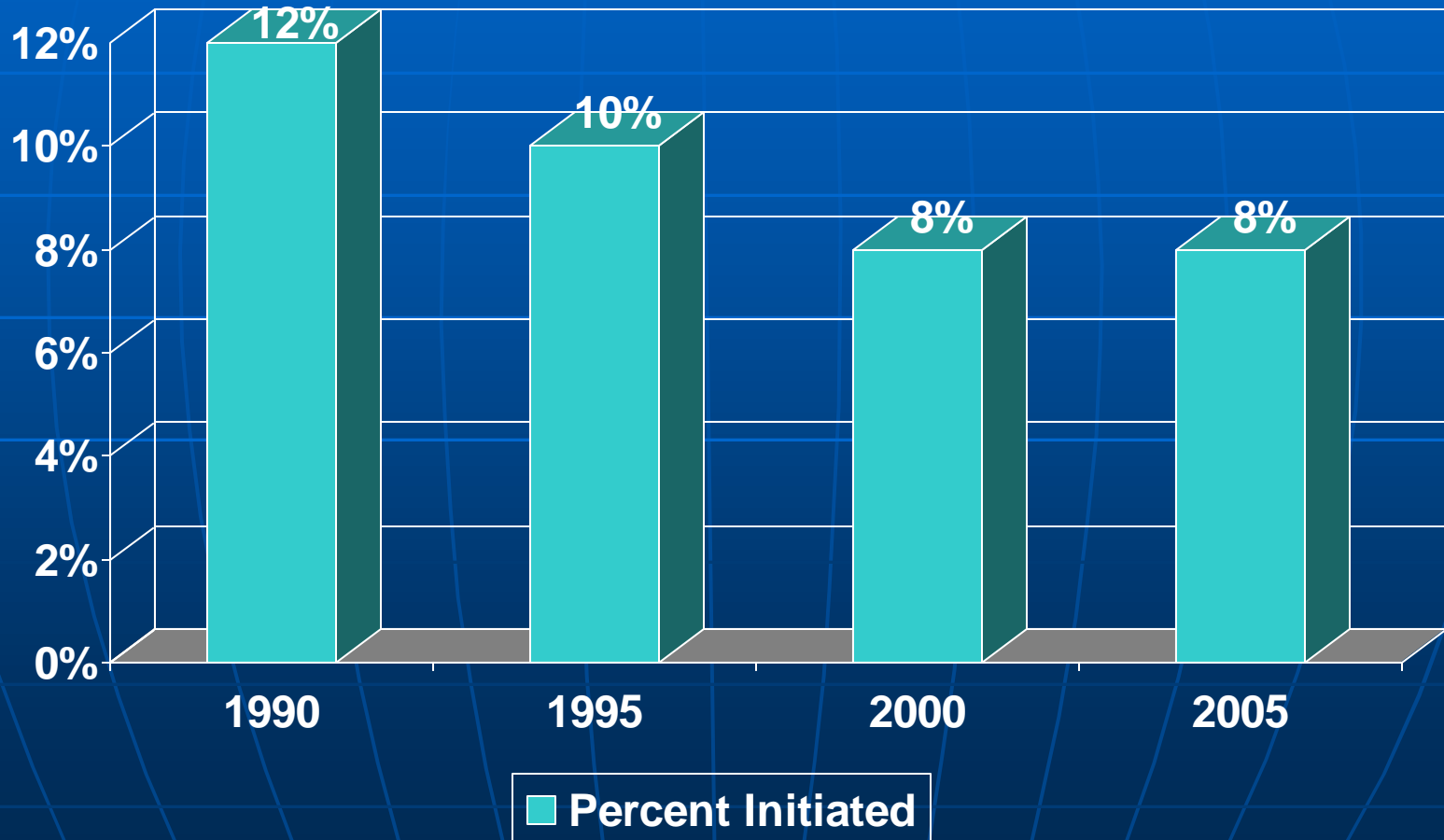
**How fast are we replacing
the old hunters?**

Recruitment into Hunting in France

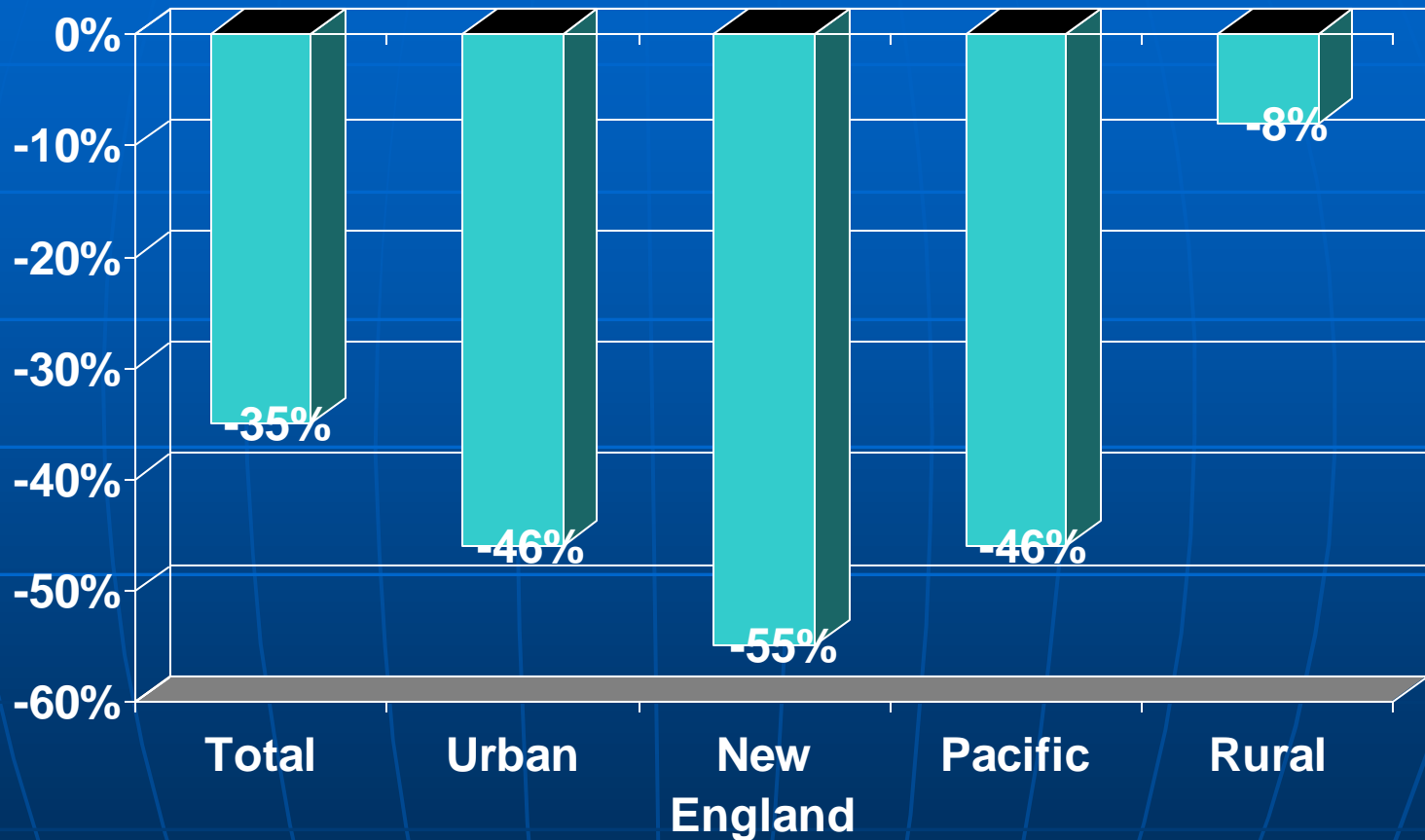
Results of the hunting licence exam since
1975



Hunter initiation: the percentage of children (age 6 and over) residing at home who have ever participated in hunting (US Data)



Percent Decline in Initiation



US 1990-2005

Why are hunter populations declining and aging and failing to reproduce?

We don't really know...some things we can rule out...others need investigation and most of all we need better data

Probably not having an effect

- ☐ Anti-hunting attitudes of the general public
 - ☐ Hunter education requirements in the US
 - ☐ Change in Family structure (single parent families)
-

Hunter Education Requirements

- These might seem like barriers
 - But they are also ways of becoming a hunter
- We examined hunting participation among 600,000 individuals and found *no lower rate* of being a first time hunter for those who had an education requirements than those who did not when other variables were statistically controlled.
- Heberlein, T. A. and E Thomson. 1997 "The Effects of Hunter Education Requirements on Hunting Participation and Recruitment in the United States." Human Dimensions of Wildlife. Volume 2, Number 1, Spring. pp. 19-31.

Single Parent Families

- ❑ Using the General Social Survey
 - ❑ Found that controlling of residence, race, and income--children of single parent families were no less likely to hunt.
 - ❑ For example Jay Reed the Milwaukee Journal Outdoor writer—grew up in a mother headed household
 - ❑ In rural areas someone will take a boy hunting—but not a girl
 - ❑ Heberlein, T. A. and E. Thomson. 1996 "Changes in U. S. Hunting Participation, 1980-90." In Botev, Nicola (ed). Transactions of the XXII Congress of the International Union of Game Biologists, --The Game and the Man. Sofia: Pensoft. pp. 373-377.
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Not having a clear and immediate effect

☐ Urbanization

- This is a slow process
- Italy and France have not had increases in urbanization at the time of steep declines

☐ Suburbanization and loss of hunting opportunities

- Suburban families have least loss of initiation—this is where the hunters live in the US
-

How we lose hunters? --CWD in Wisconsin

CWD killed no hunters...they didn't get sick and die from eating deer.

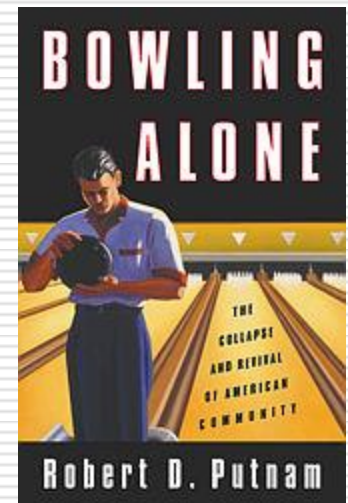
The agency reaction to CWD, a classic example of the social amplification of risk...

Led to the reduction of 95,000 gun and bow licenses in one year and...

They didn't come back

What also might be having an effect

- ❑ Complexity of rules and entry difficulties
- ❑ Change in game populations
- ❑ Mobile human population
 - Difficulty to find entry points
- ❑ Increase in alternative activities
- ❑ Loss of leisure time
- ❑ Loss of social capital
- ❑ Declining influence of rural culture



Next Steps

- We must build a better science of hunter population dynamics
 - We must treat the study of hunter population with the same attention as we do declines in wildlife populations
 - We must carefully study the cases where we have declines to understand why
-

We further need to

- ❑ Join hunter data with census data
 - ❑ Gather better comparable data
 - Need to accumulate the raw data by individual ages, and keep this data base up to date
 - ❑ Shift from individual survey data to aggregate data which can deal with social trends
 - ❑ Follow panels of participants and non participants over time
-

I PROPOSE: International Center for the Study of Hunter Population

- ❑ Long term—5 years or more
- ❑ Interdisciplinary
 - Human Demographers, Biologists, Sociologists, Human Geographers, Anthropologists, Psychologists
- ❑ Substantial Funding
- ❑ Accumulate data
- ❑ Examine and test the hypotheses
- ❑ Propose and evaluate programs to maintain or increase hunter populations

But who is going to support and fund this?

We are not likely to get help from the general scientific community

“I do not think that the scientific community cares if hunters go up or down. There is no convention of biodiversity which appeals to brown bear or lynx.”

Swedish Professor of Wildlife Ecology

It must be up to the hunters to accomplish

Leopold was worried about extinctions of game species when he wrote "Goose Music" in the 1930's

" And when the dawn-wind stirs through the cottonwoods, and the grey light steals from the hills over the old river sliding past its wide brown sandbars--
-what if there be no more goose music."

The science and management success of the 20th century has been to restore these species...

But...what if there be no more
hunters to hear those geese???

**That is our challenge for the
21st Century**

THANK YOU

I would like to thank the following for providing the data in this presentation

- ❑ My Students at the Swedish University of Agricultural Sciences: Carleigh Johnston, Anita Norman and Christopher David (C), Camillo Biagioli (I), Simone Dechandt, Claudia Kaulfuß, Kathrin Hesse, Martin Kunze (D), Bjarni Serup(DK), Amélie Hennion-Imbault, Gregoire Houillot, Axel Villard Maurel (F) Harald Brenner (AT)
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