

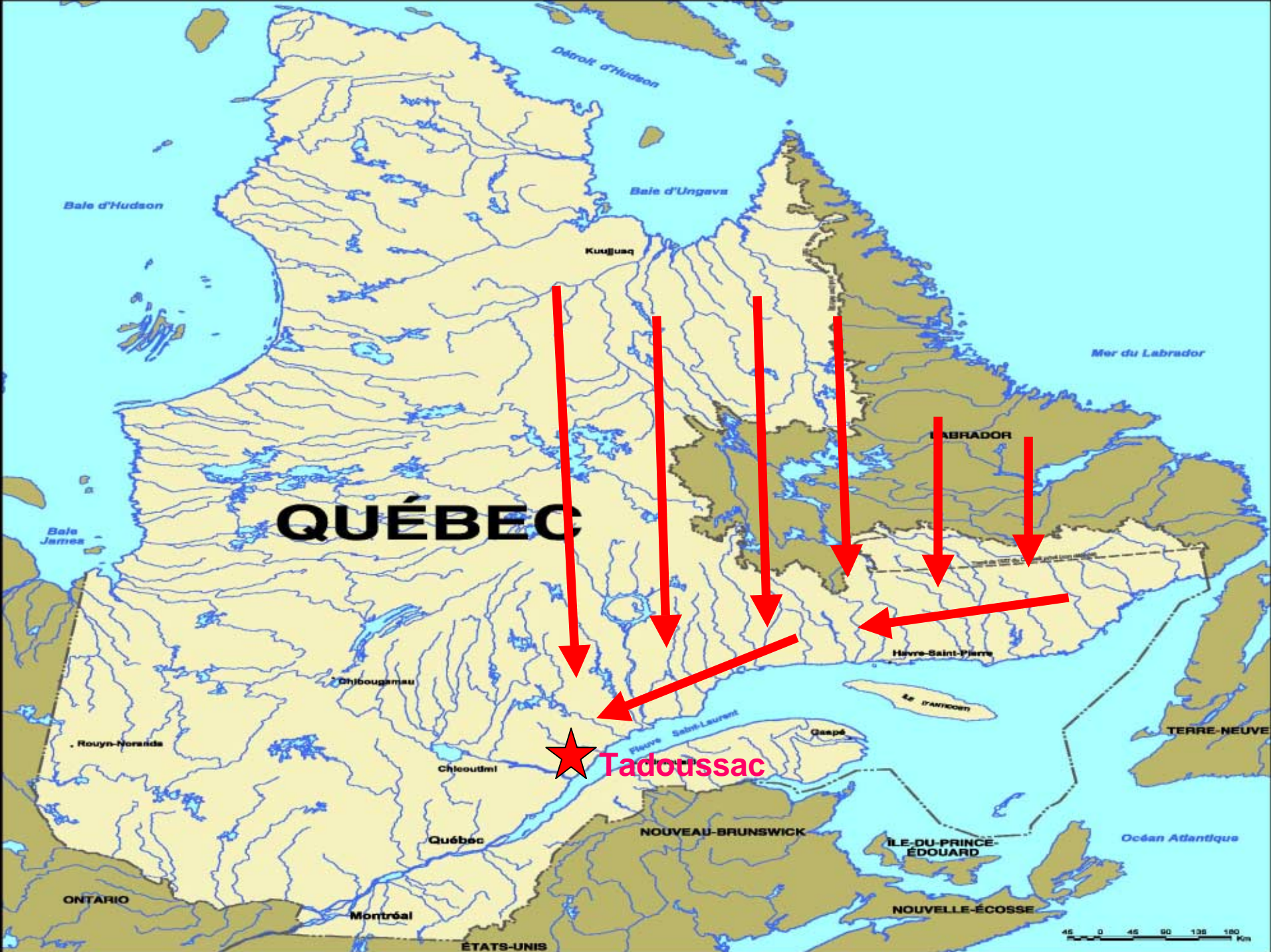
# Status of Osprey in Québec

# Cyr and Larrivée 1995

- **ÉPOQ: index of constancy (nb checklists with Ospreys/ total nb checklists)**
  - 6741 records of Ospreys between 1969-1989
  - Percent annual change of -0.03%  
( $r^2 = -0.17$ )
    - Not significant, stable population
    - Mainly from southern part of the province where most bird observations are made
- Need to update (1990-2003 ?)

# Tadoussac Bird Observatory

- Tracking of fall raptor migration since 1993
- Northern breeding populations
- Only North American site where golden eagles are tracked
- Second North American site for bald eagles and peregrine falcons
- 1.5 to 3.5 more birds noted/sampling effort than at Hawk Mountain



**QUÉBEC**

**Tadoussac**

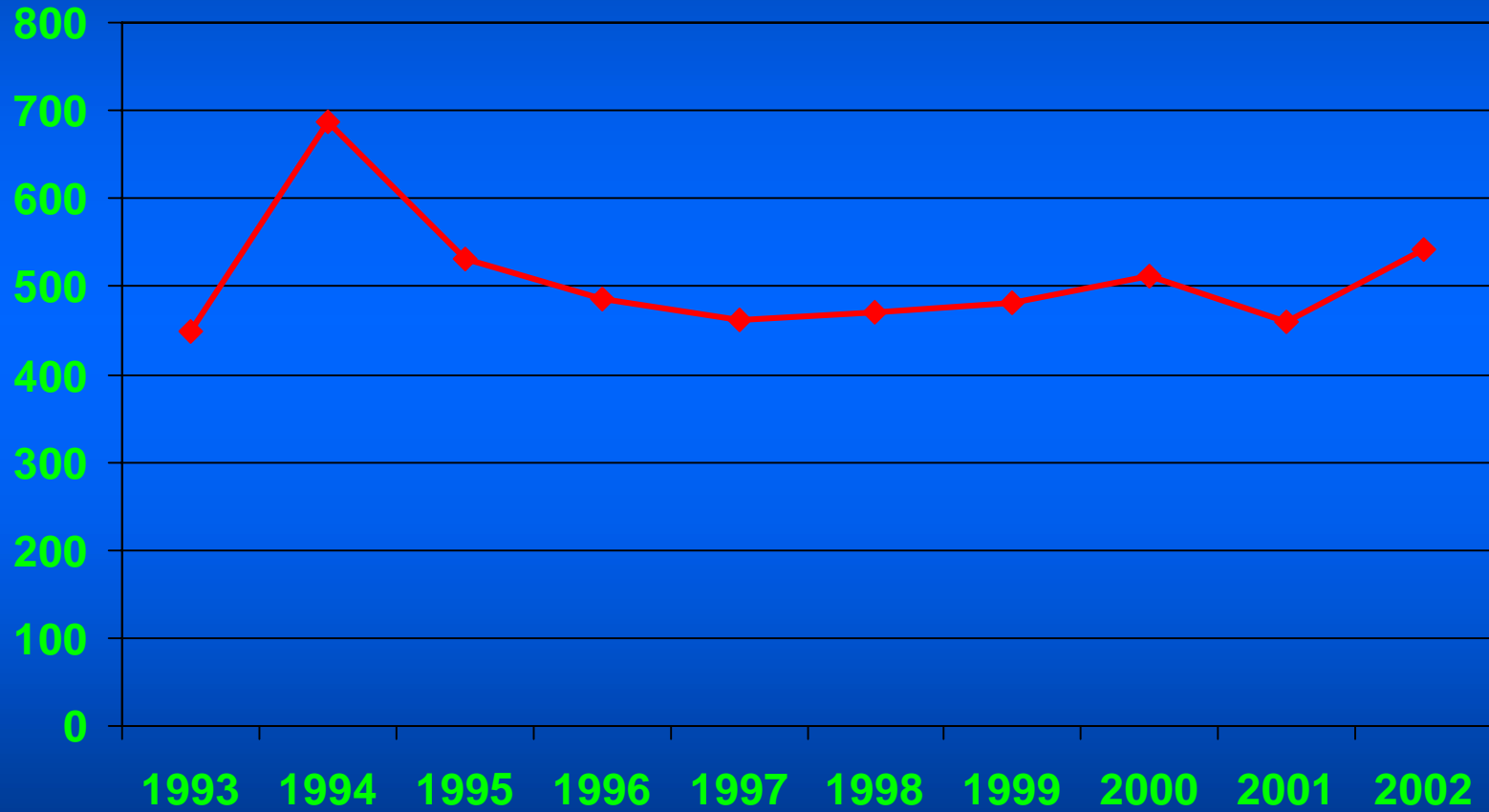
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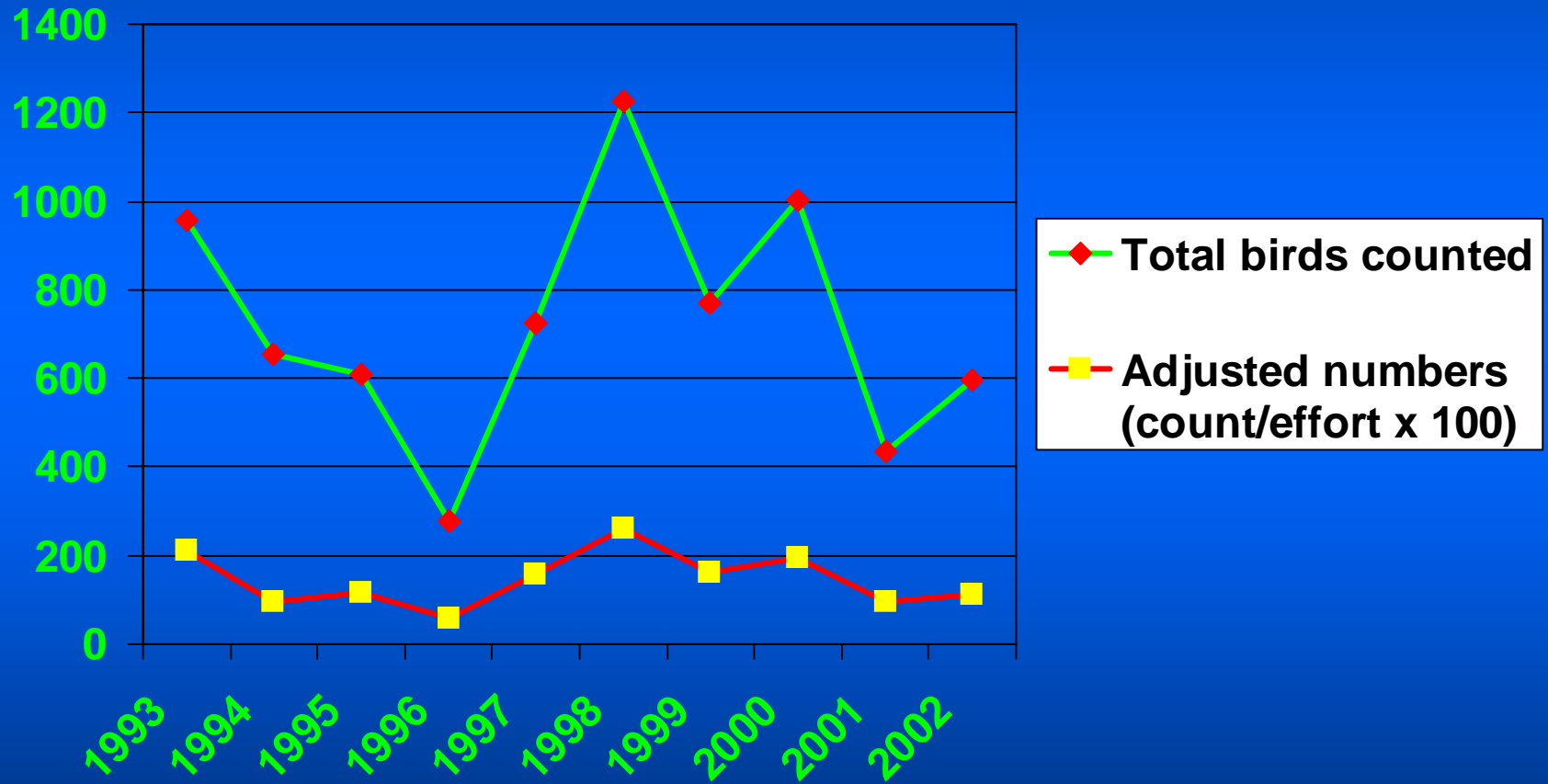
# Methods

- **Daily counts of migrating raptors**
  - Start at 8h00, minimum of 4 hres
  - Interrupted if < 10 birds counted
- **Two observers (the same from 1993 to 2002)**
- **9 August to 28 November**
- **Peak migration period (98% of counts of Ospreys): 28 August – 16 October**

# Sampling effort for Osprey during peak migration (observer-hours)



# Osprey numbers



# Ospreys at Tadoussac

- **Excellent index of annual fluctuations**
- **Linear regression of Osprey numbers/standardized sampling effort (peak migration period) : 7% (1993-2000)**
- **But large confidence intervals (-43% to 26%)**
  - **Population trend blurred by cyclic fluctuations within relatively short sampling period**
  - **Importance of pursuing efforts**
- **Gain in precision by combining with other Bird Observatories**