

Integriertes Populationsmonitoring - der Blick hinter die Kulissen

## Langzeitdaten zur Demografie von Greifvogelarten in Ostdeutschland



Ulrich Köppen

[www.lung.mv-regierung.de/beringung](http://www.lung.mv-regierung.de/beringung)



Die individuelle Markierung als persönlicher „Ausweis“ des Vogels

- ... vermittelt Wissen über das Vogelleben, das anders nicht erlangbar ist,
- ... wurde erstmals 1899 vom dänischen Lehrer Mortensen verwendet,
- ... wird heute weltweit millionenfach in Forschung und Monitoring eingesetzt.



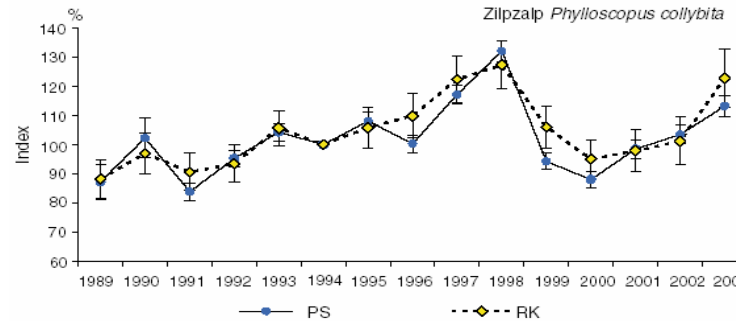
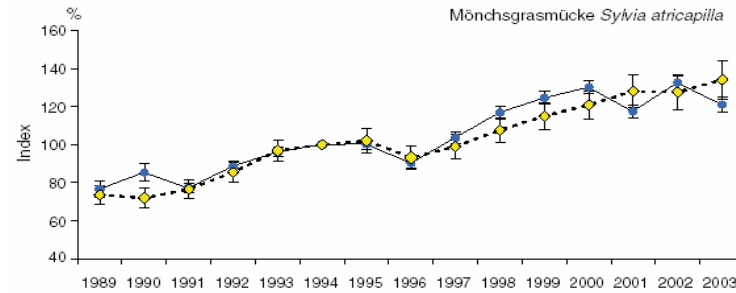
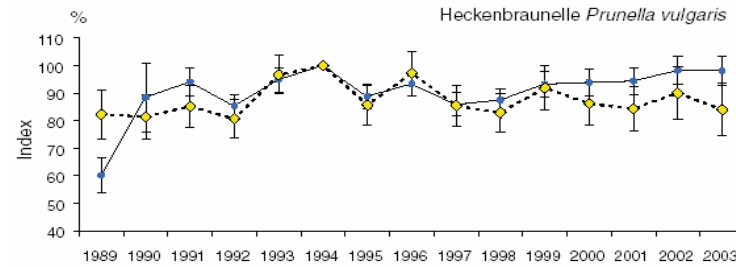
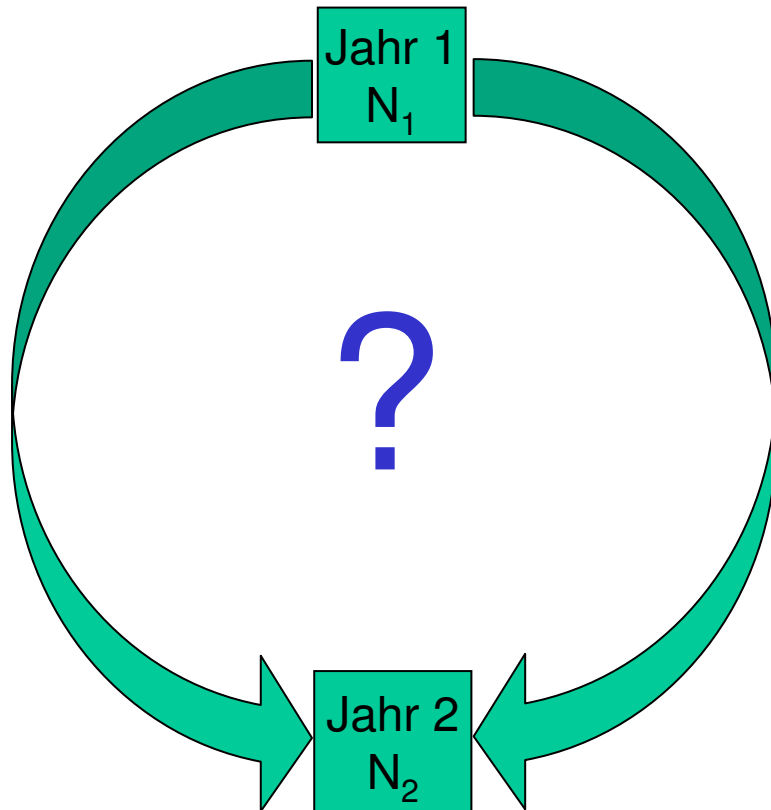
**ie Methode Vogelberingung dient der**

## Beschreibung und Beobachtung des Vogellebens

- Saisonale Wanderungen
    - Zugverhalten
    - Zugrouten
    - Rastgebiete
    - Winterquartiere
  - Physiologie und Genetik
    - Steuerung des Zugverhaltens
    - Stoffwechsellleistungen
    - Nahrungsökologie
- Dynamik von Vogelbeständen
    - Erfassung von Beständen
    - Beschreibung demografischer Prozesse
    - Vorhersage von Bestandsveränderungen
    - Aufdeckung kausaler Zusammenhänge



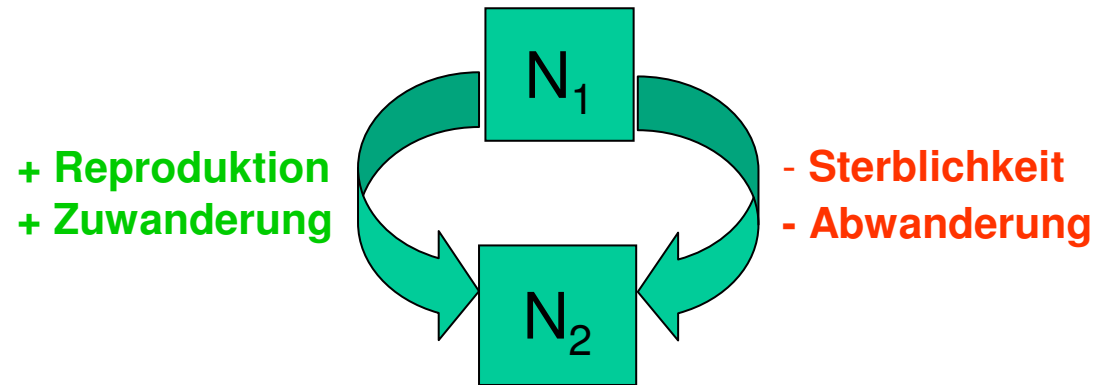
# Vogelmonitoring = Dynamik von Vogelbeständen überwachen



Flade, M. &  
Schwarz -  
Vogelwelt,  
2004



## Dynamik von (Menschen- und) Vogelpopulationen:



### Methode: Integriertes Populationsmonitoring

d.h. mittels Kombination von Zähl- und Markierungsmethode

- **Bestandsgrößen,**

Ziel: Wissenschaftlich begründete Einschätzungen des aktuellen Zustands von Vogelpopulationen in der Vogelschutzkonvention sowie ihrer künftige Entwicklung.

kontinuierlich überwachen!

„*Current viability and future prospects...*“ EU-VSchRL Berichtspflichten!





## Langzeitdaten zur Demografie

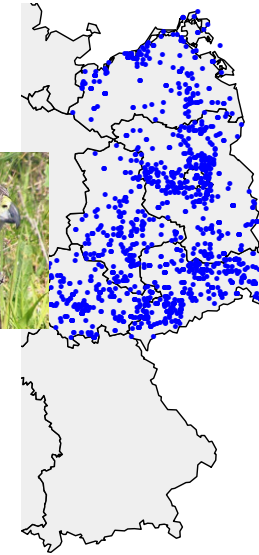
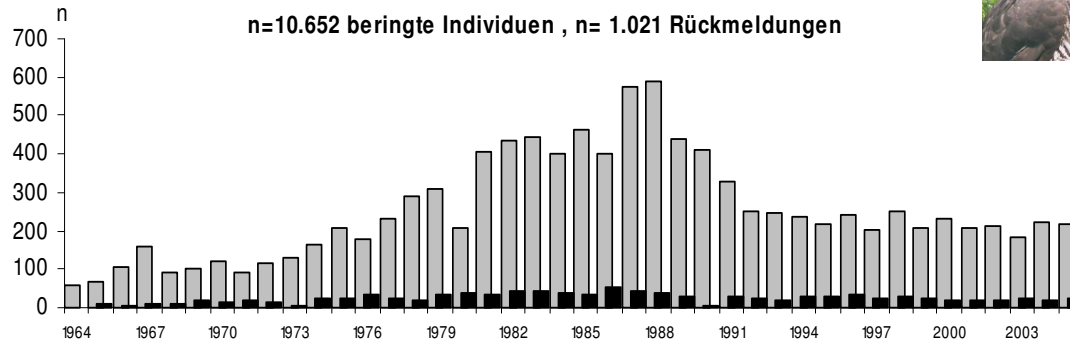
- **Bruterfolg** – mittlere jährliche Anzahlen bringter Nestgeschwister,
- **Ansiedlungsverhalten** – Entfernung der Brutzeitfunde vom Geburtsort,
- **Todesursachen** - Wandel von Fundursachen und –umständen,
- **Jahreslebensraum** – geografische Zuordnung von Umweltfaktoren,
- **Fortpflanzungsperiode** – mittlere Beringungsdaten von Nestlingen.



# Datengrundlagen

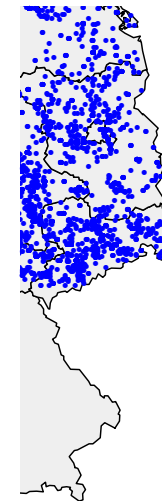
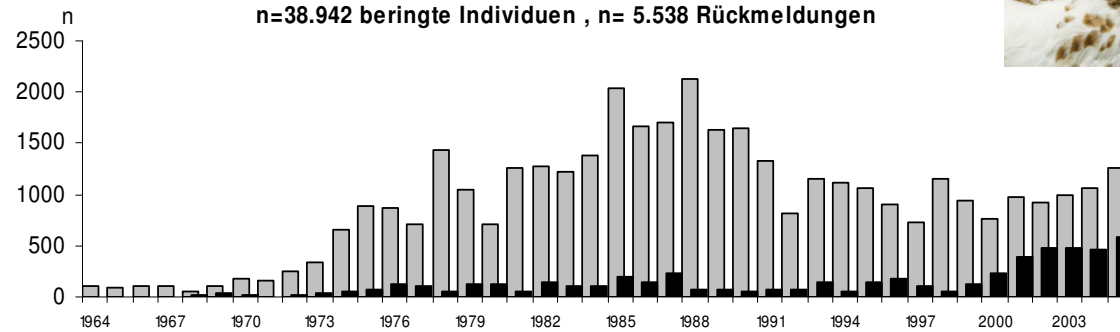
## Habicht *Accipiter gentilis*

n=10.652 beringte Individuen , n= 1.021 Rückmeldungen



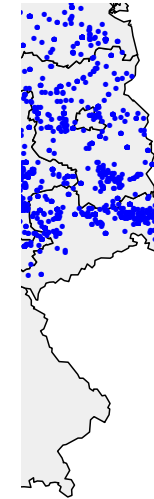
## Mäusebussard *Buteo buteo*

n=38.942 beringte Individuen , n= 5.538 Rückmeldungen

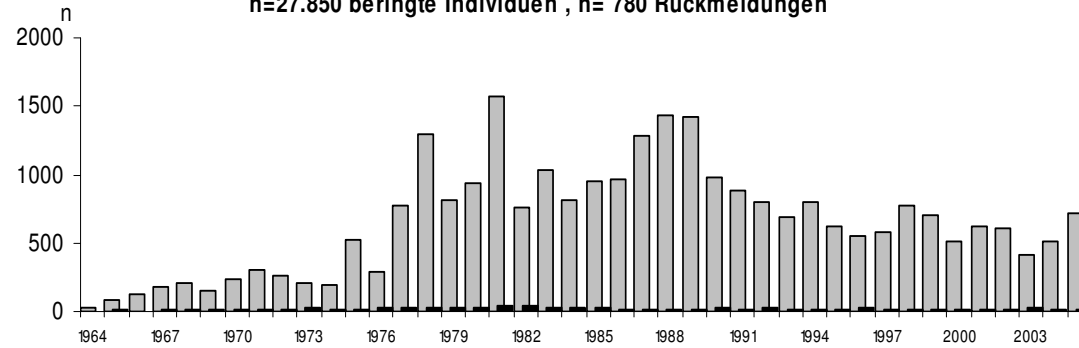


# Datengrundlagen

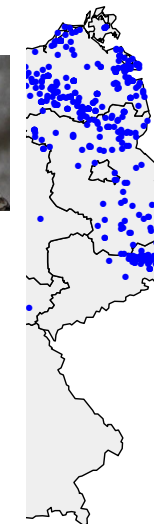
## Rohrweihe *Circus aeruginosus*



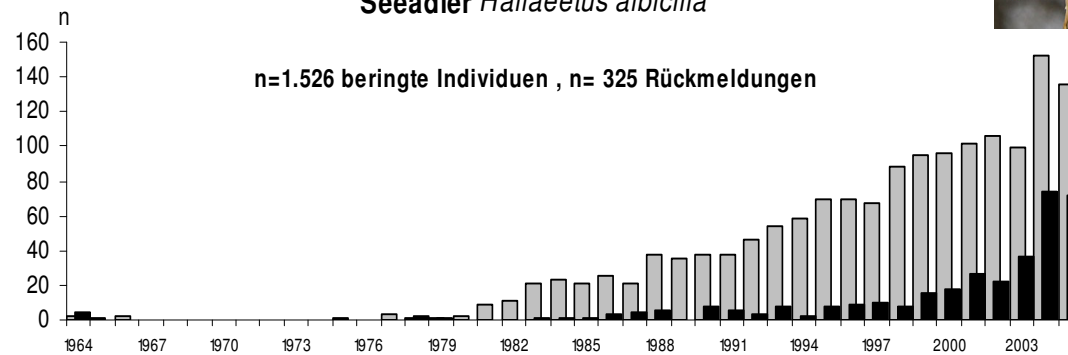
n=27.850 beringte Individuen , n= 780 Rückmeldungen



## Seeadler *Haliaeetus albicilla*



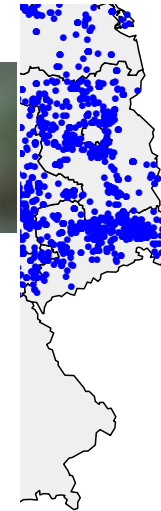
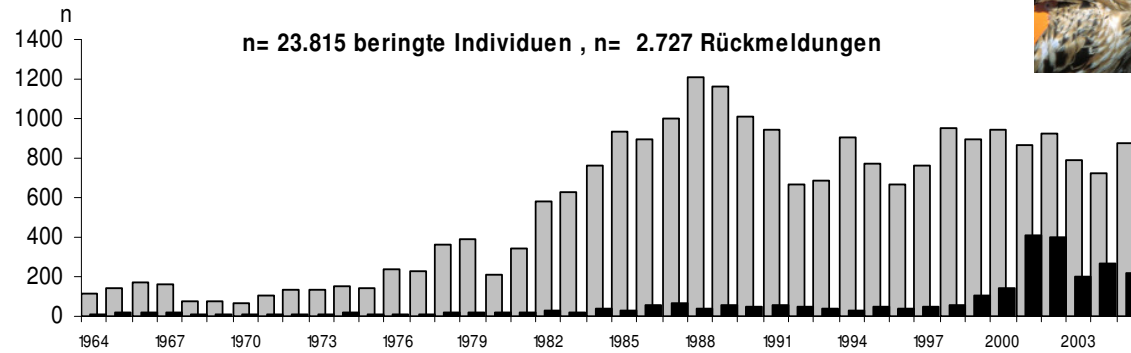
n=1.526 beringte Individuen , n= 325 Rückmeldungen



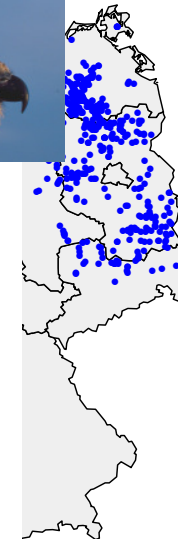
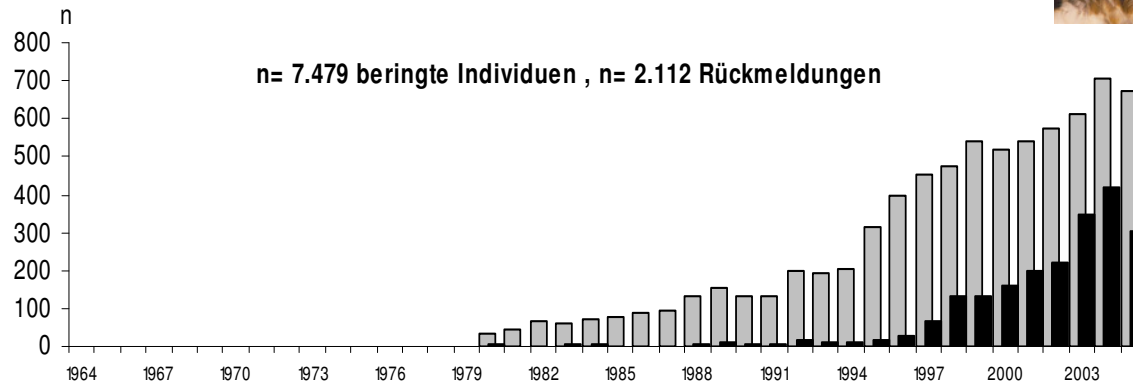


# Datengrundlagen

## Rotmilan *Milvus milvus*



## Fischadler *Pandion haliaetus*

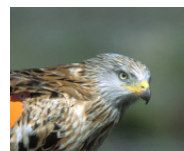
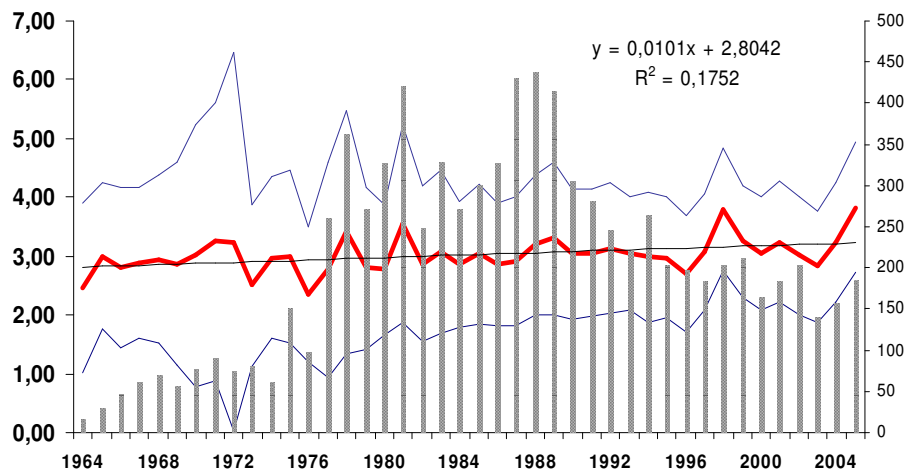


# Reproduktion



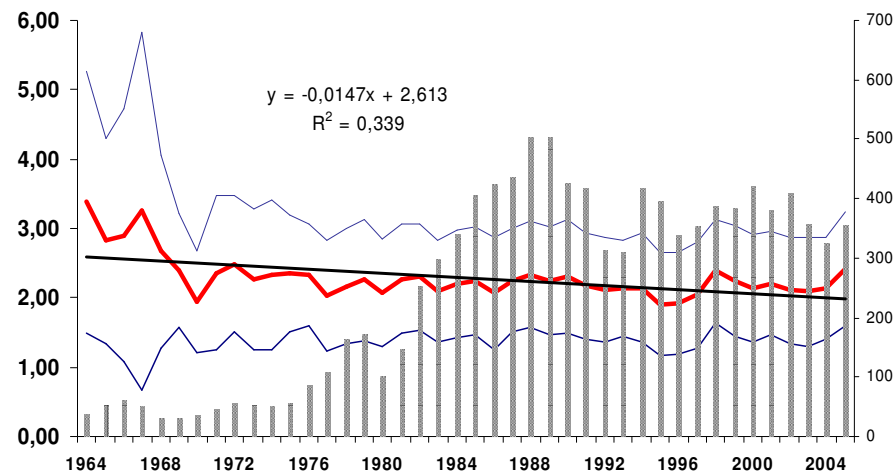
*Circus aeruginosus*

n=8.554, Mittel: 3.02 s=1,33



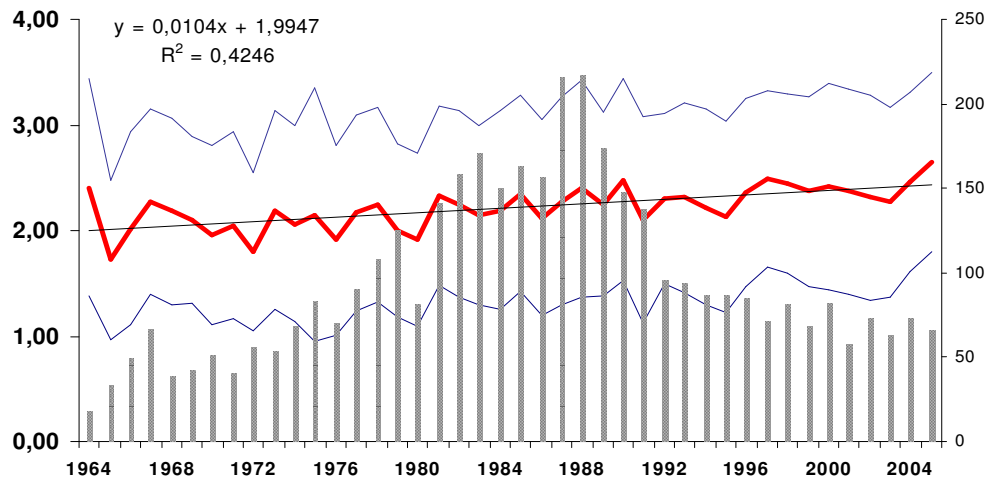
*Milvus milvus*

n=10.376, Mittel: 2,29, s=0,92



*Accipiter gentilis*

n=3.947, Mittel: 2,217, s=0,903

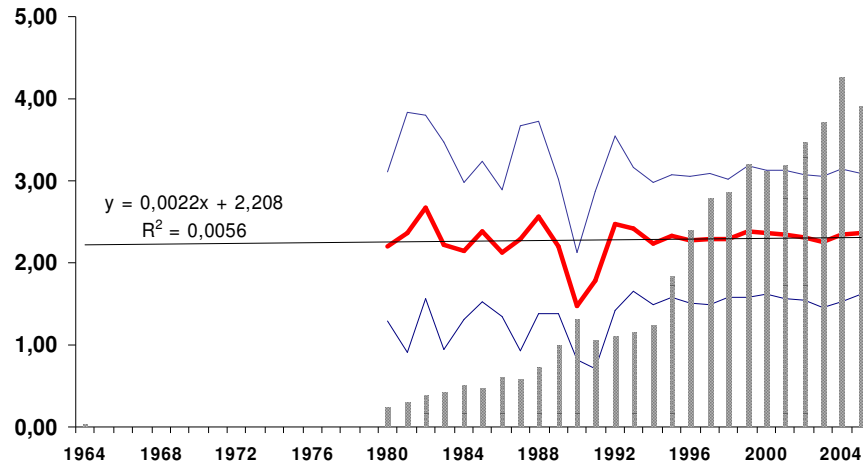


# Reproduktion



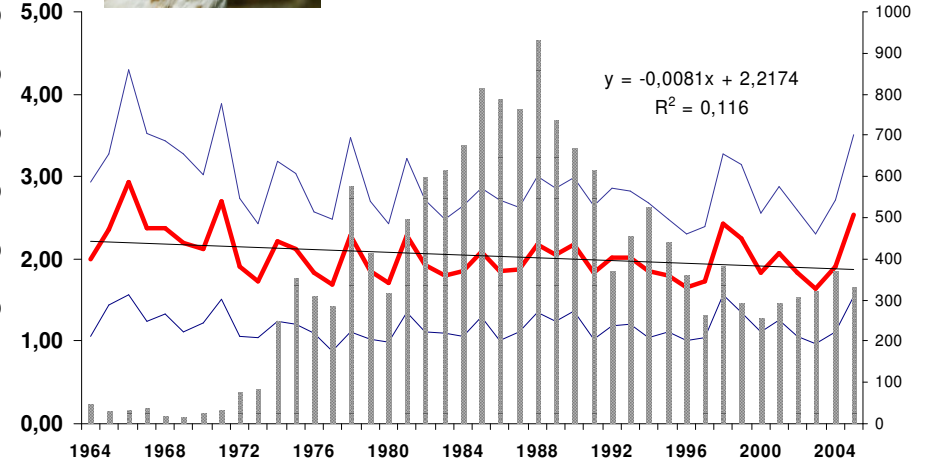
*Pandion haliaetus*

n=3.175, Mittel: 2,27, s=0,89



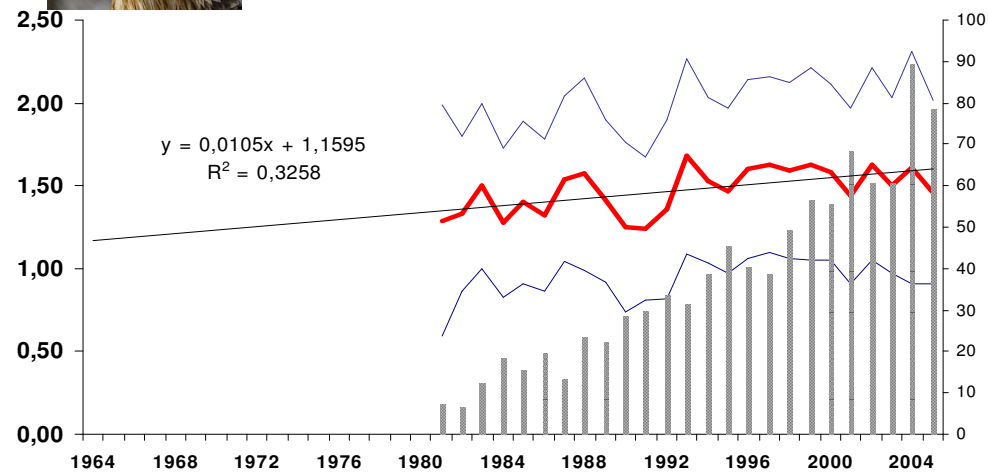
*Buteo buteo*

n=15.404, Mittel: 2,04, s=0,85

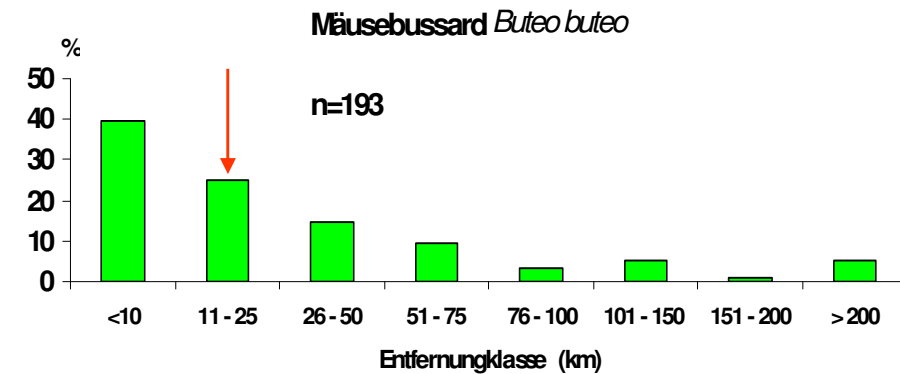
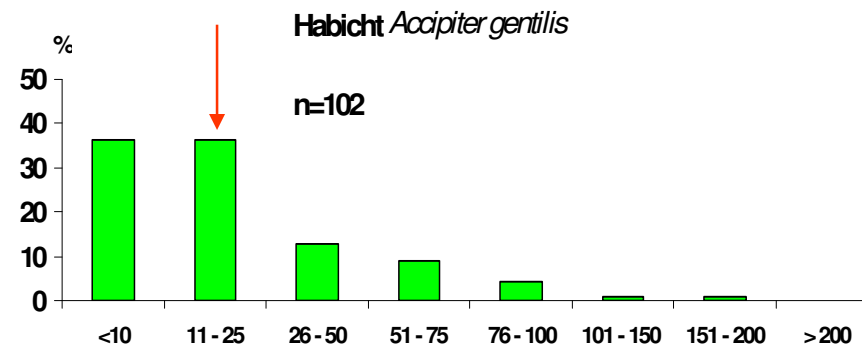
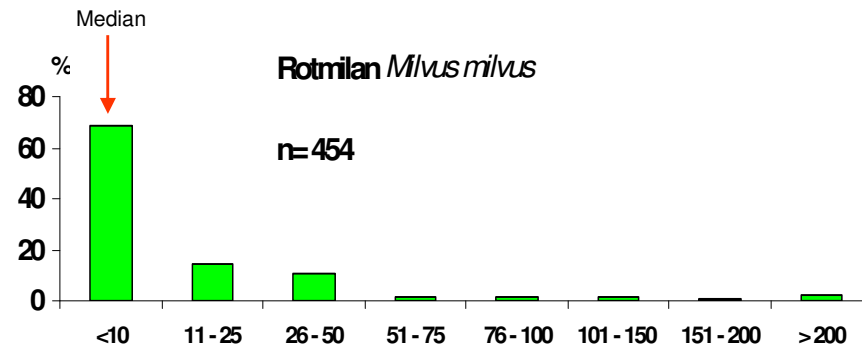


*Haliaeetus albicilla*

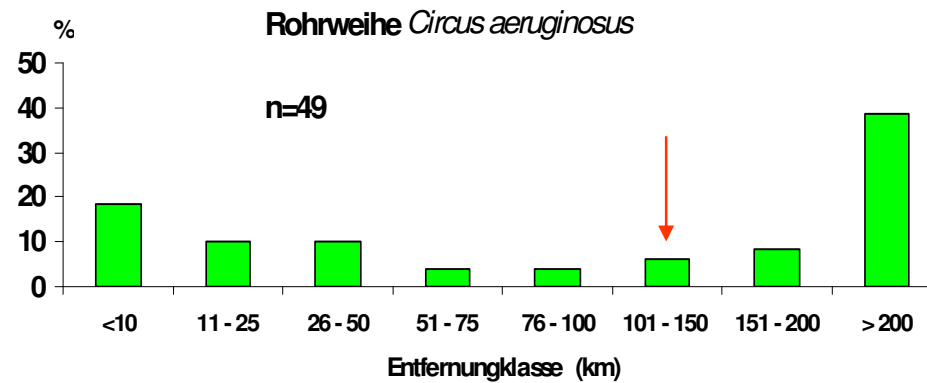
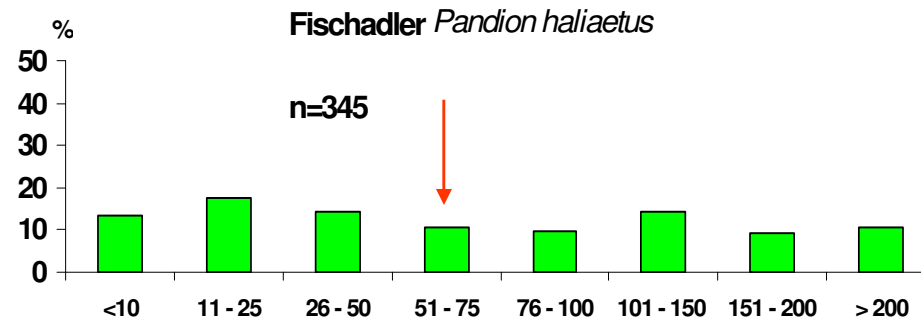
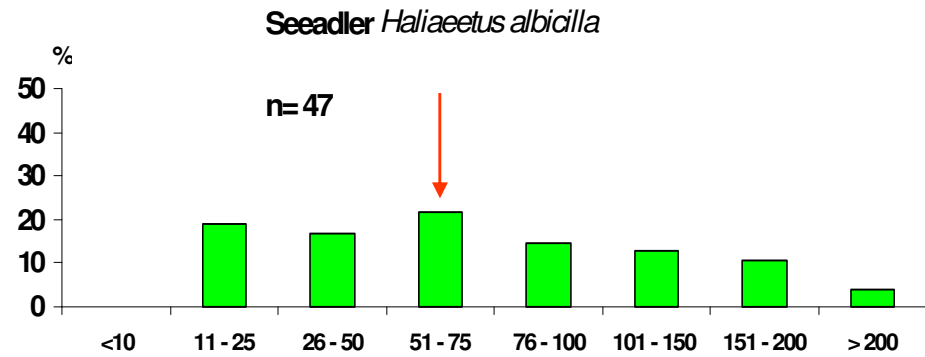
n=932, Mittel: 1,45, s=0,51



# Ansiedlungsverhalten



# Ansiedlungsverhalten

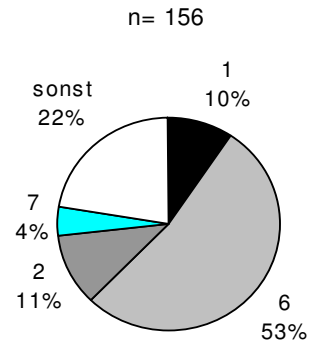


# Todesursachen

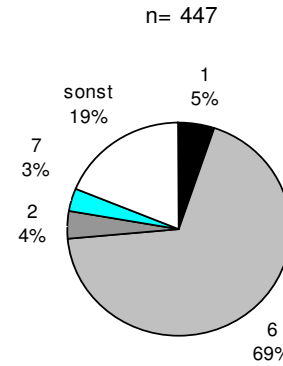
- geschossen
- andere gezielte Nachstellung
- Kollisionen jeglicher Art
- Wetteropfer
- alle anderen bekannten



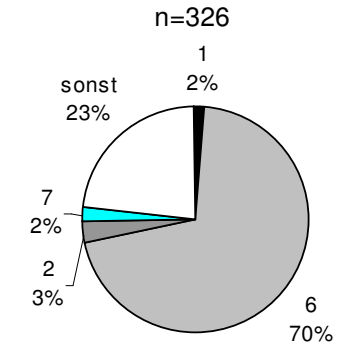
## 1964 - 1979



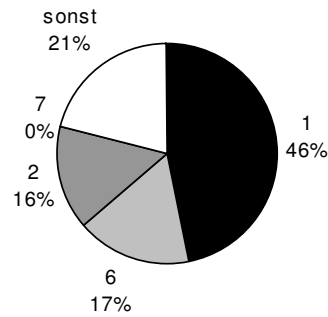
## 1980 - 1994



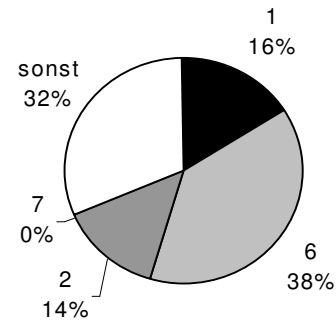
## 1995 - 2005



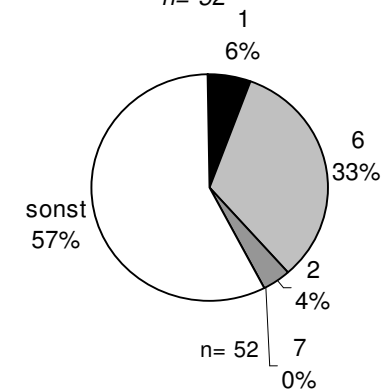
## n=92



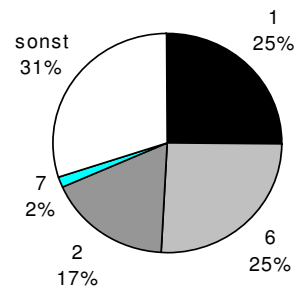
## n= 85



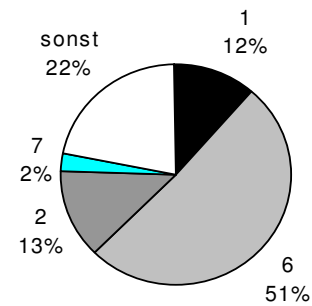
## n= 52



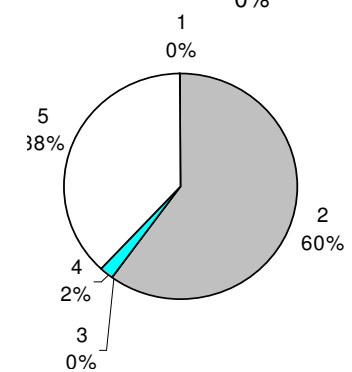
## n= 64



## n= 87



## n= 52

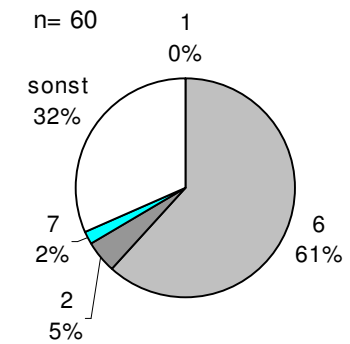
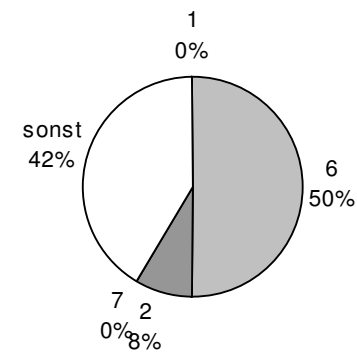
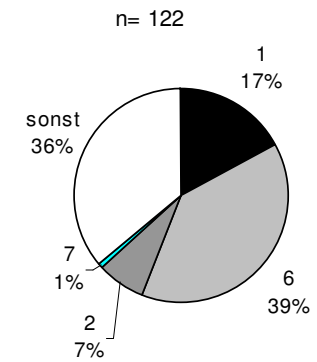
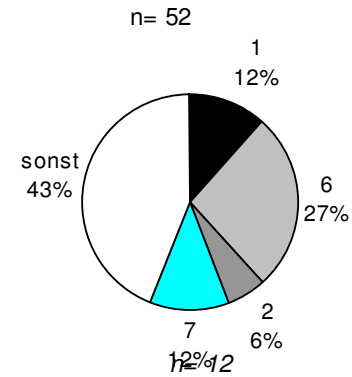
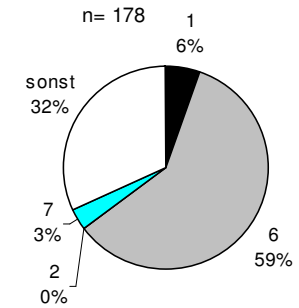
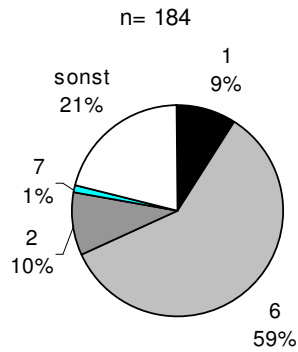
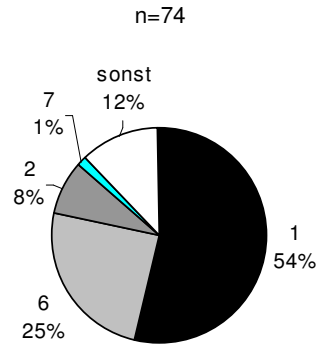


# Todesursachen

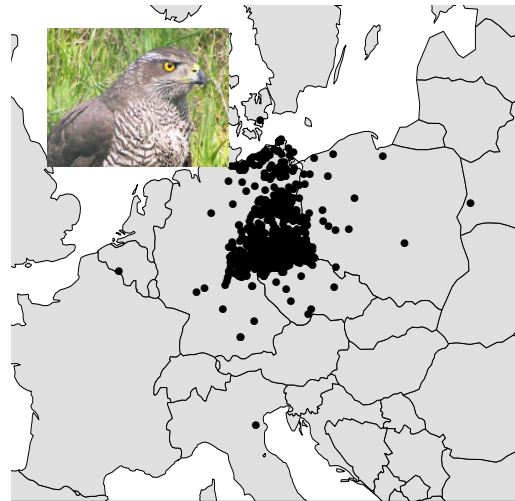
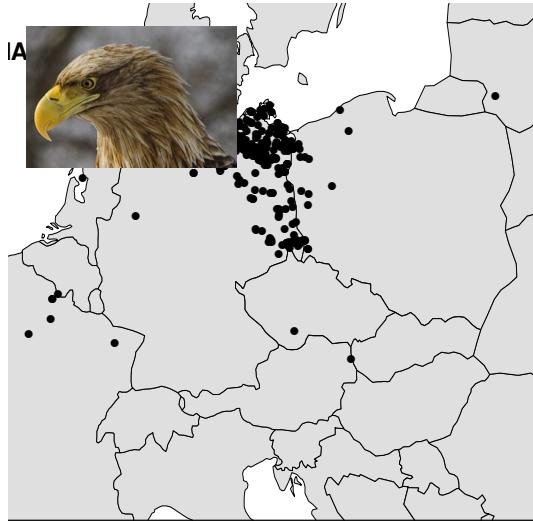
1964 - 1979

1980 - 1994

1995 - 2005

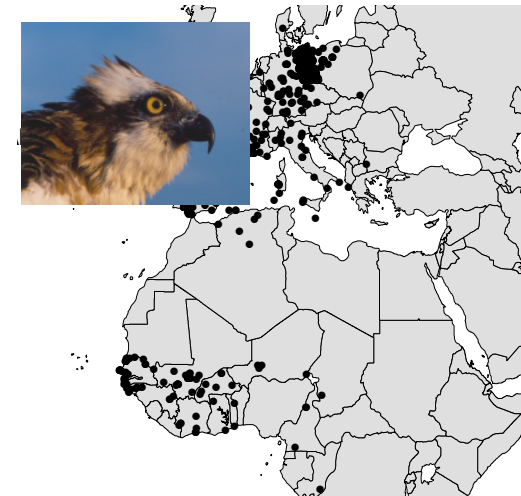
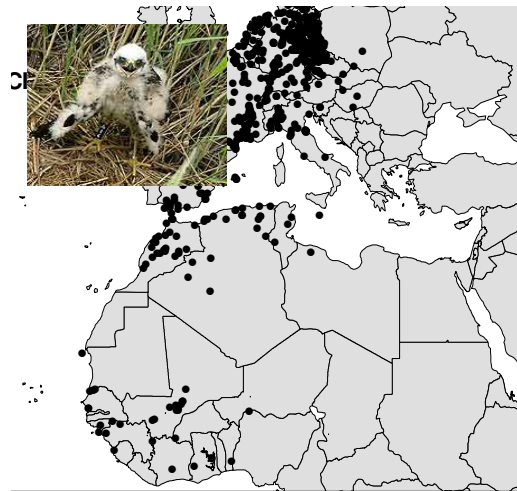
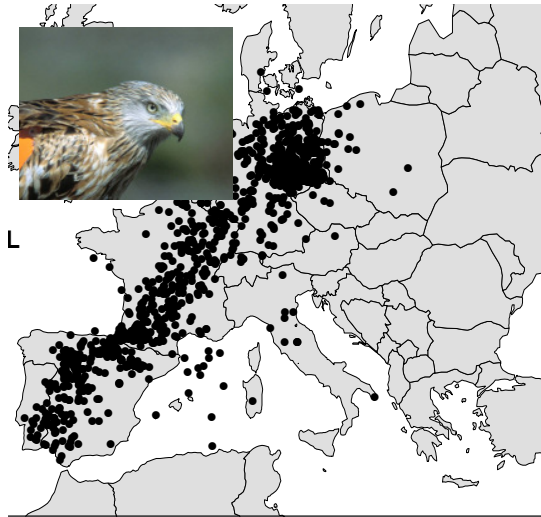


# Geografischer Gesamt-Jahreslebensraum

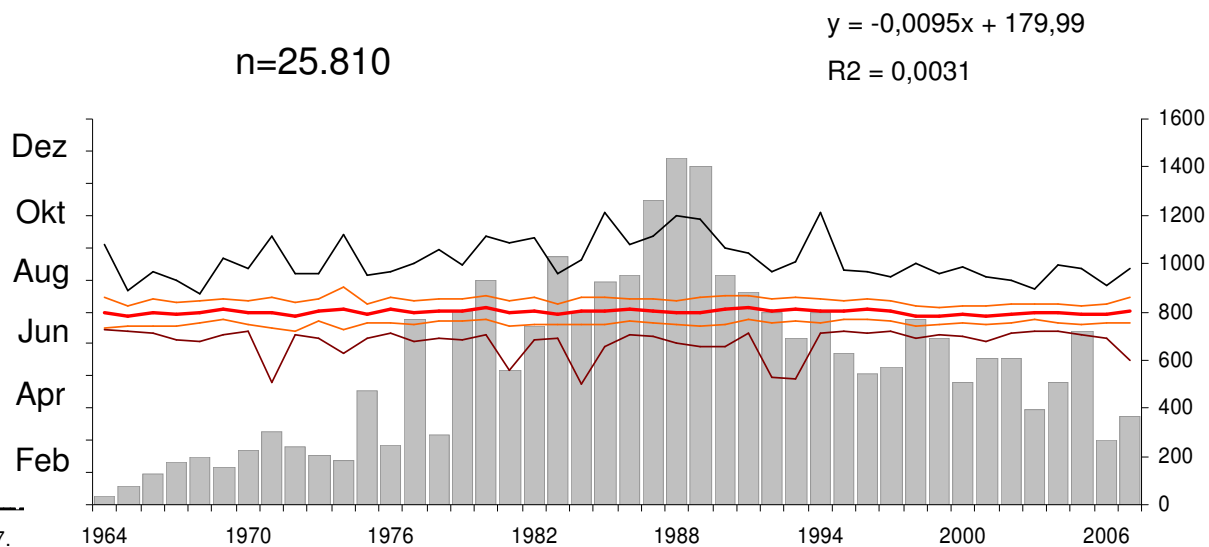
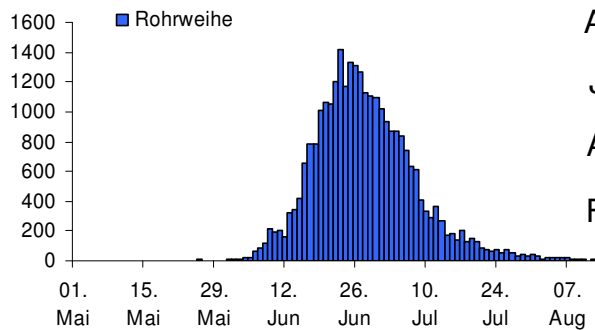
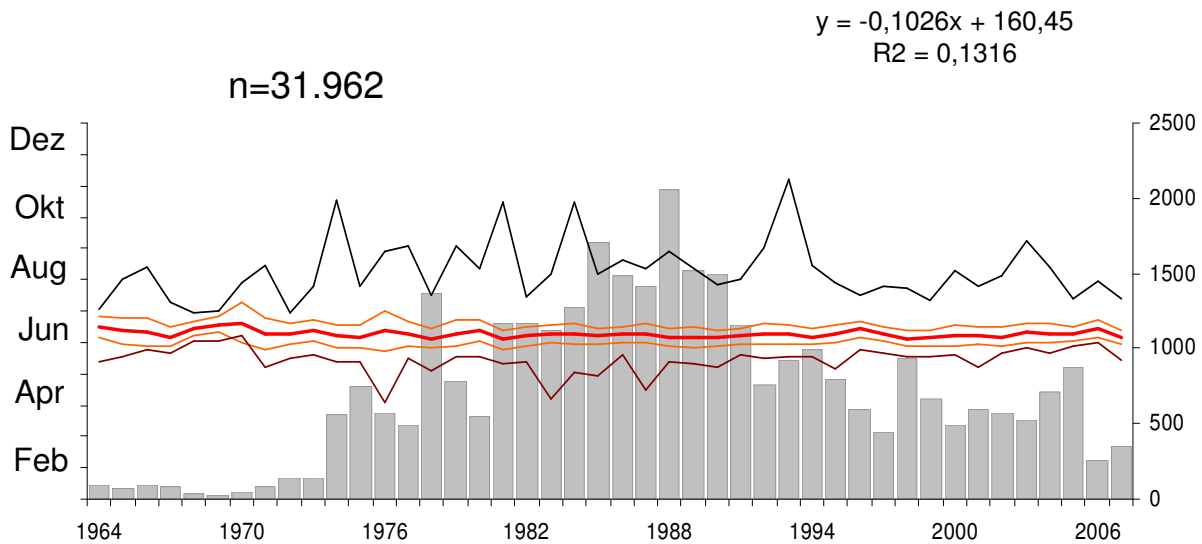
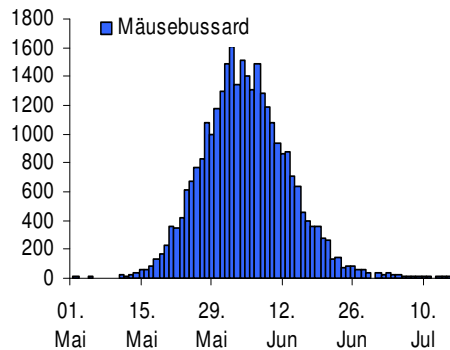




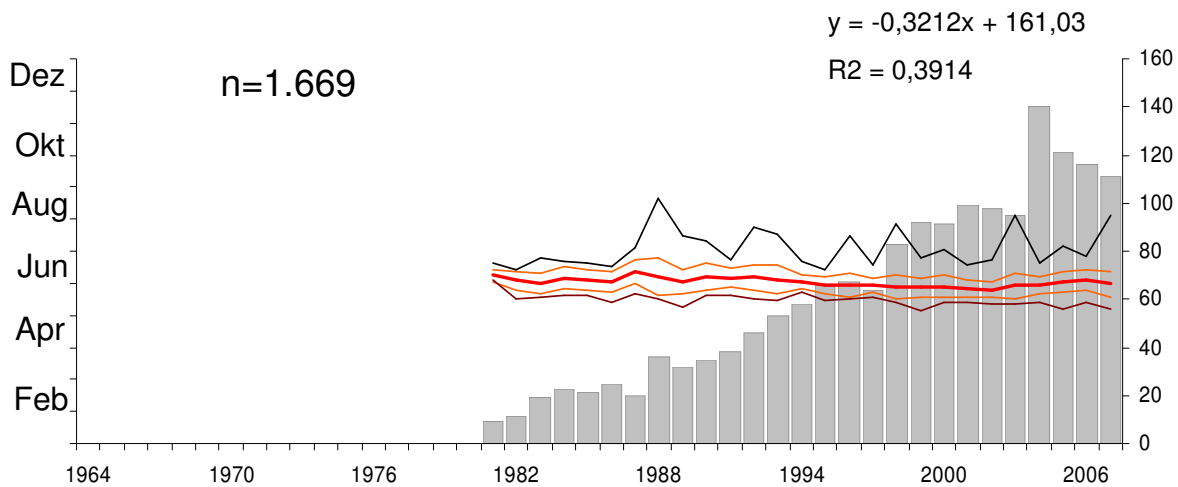
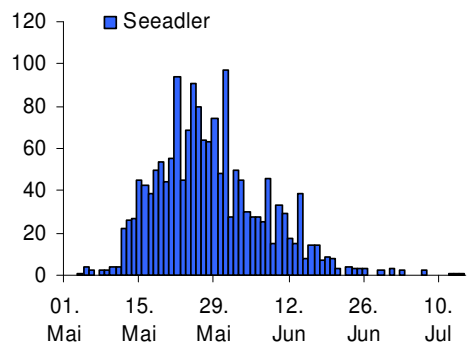
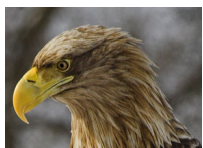
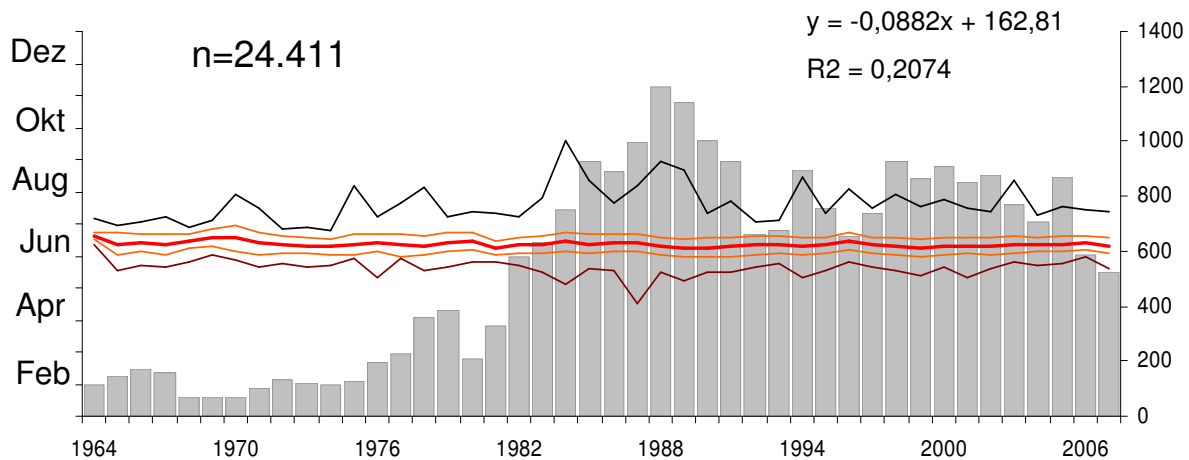
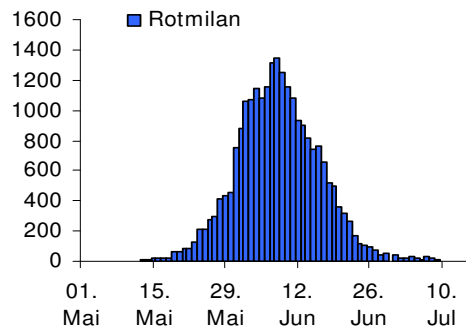
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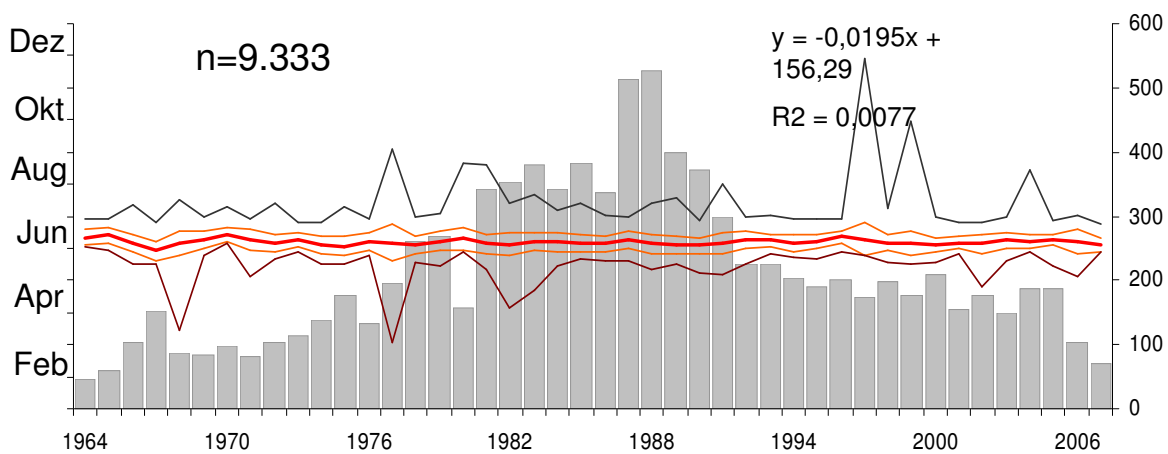
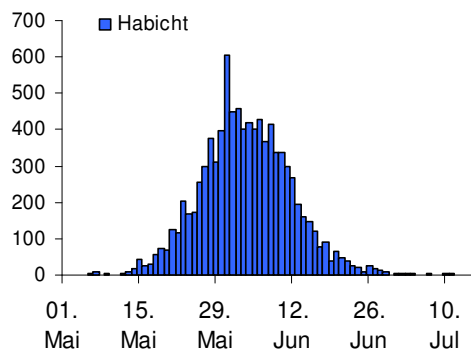
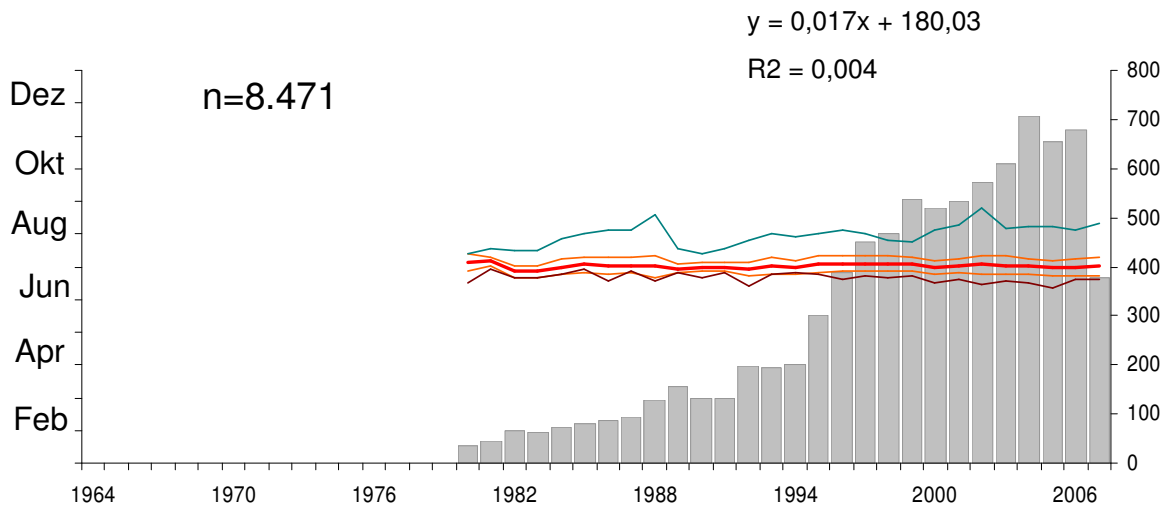
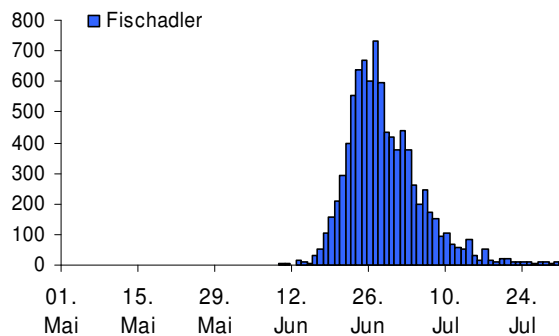
# Brutperiode



# Brutperiode



# Brutperiode





Dank an alle Beringer, Ringableser und Ringfundmelder!