

Bullfrog – BELSPO



Gerald Lovette, 1980

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Bullfrog

- Distribution in Flanders
- Impact
- Management
- Future actions



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Bullfrog

- East coast of US
- 1930 in Europe (Italy, consumption)
- 1990 Flanders (ornamental)
- (Ficetola et al. *Mol. Ecol.*)
 - Several independent introductions from US followed by translocations over Europe (25)
 - Low genetic variation – colonization by less than 6 females – consequences for management

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Distribution in Flanders

- Isolated populations
- Core population



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Impact

- Three parlementaire vragen to Vlaams Parlement (Ministers Peeters and Crevits)
 - July 2007
 - September 2007
 - March 2008
- Disaster for biodiversity (eats everything)
- Noise pollution

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Impact

- Competition
 - Other amphibians (research in US)
- Predation
 - All kind of biota
- Carrier of diseases
 - *Batrachochytrium dendrobatidis*
- Put into perspective
 - Different habitat (permanent-temporal)
 - Decline of indigenous amphibians (loss of habitat)

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Management



- **Electrofishing**
- **Shooting**
- **Fykes, traps**
- **Fencing**
- **Trapping by night with handnet**
- **Water drawdown**
- **Expensive and not sustainable**




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Management

- **Govindarajulu et al. 2005**
 - Demographic modeling to identify life stages with strongest influence on population dynamics
 - Efforts nowadays mostly on tadpoles and adults
 - However, culling of subadults in fall would be most effective in reducing population sizes

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Future actions

- **Legal framework not adequate**
 - No introduction in the EU (Council Regulation 338/97)
 - Within EU no restrictions
 - **Besluit Vlaamse Regering 1993**
No introductions of AIS into nature
- **Prohibition of trade AIS**
 - Inspection and persecution




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Future actions

- **Flanders**
 - **INTERREG about AIS Flemish-Dutch border**
 - Communication*
 - AIS*
 - Innovation*
 - Restoration of habitats
 - Chemical agents (sterilization and liquidation)
 - Adapted traps (sound, visual cues)




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