Current work on the control of invasive species of crayfish

Paul Stebbing
White-clawed crayfish (*Austropotamobius pallipes*)
Signal crayfish (*Pacifastacus leniusculus*)
1975

Austropotamobius pallipes  Pacifastacus leniusculus
1980

Austropotamobius pallipes

Pacifastacus leniusculus
Austropotamobius pallipes  Pacifastacus leniusculus
Austropotamobius pallipes  Pacifastacus leniusculus
I

(Acts whose publication is obligatory)

DIRECTIVE 2000/60/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

of 23 October 2000

establishing a framework for Community action in the field of water policy

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

(3) The declaration of the Ministerial Seminar on groundwater held at The Hague in 1991 recognised the need for action to avoid long-term deterioration of freshwater quality and quantity and called for a
Review of methods for the control of invasive crayfish in Great Britain

P. D. Stebbing¹; M. Longshaw¹; N. Taylor¹; R. Norman²; R. Lintott²;
F. Pearce¹; A. Scott¹
- Mechanical control (trapping)
- Physical control (electrocution, draining, habitat modification and barriers)
- Biological control (predation and pathogens)
- Biocidal control (the use of chemical pesticides)
- Autocidal control (male sterilisation and semiochemical and pheromone control)
- Legislative control (modification of current legislation)
- Population model (testing of certain control measures)
Trapping

• Attraction
• Retention
  – Duration
  – Density
  – Gender
  – Size
Number

Dominance

Large males
Subordinate males
Females
Juveniles

Number
Attraction (size)
Retention (size)
Male Sterilisation

- Duration
- Aggression
- Effectiveness
What next?

• Further trap development
• Field trials to commence
  – Feed into model
• Further work on male sterilisation
• Other methods for rapid response (e.g. biocidal)
• Development of ISAP