Understanding the social licence challenges for invasive species

Outlook 2018 | Shared responsibility and partnerships in contested spaces
Invasive species management is risky business
Securing a social licence for invasive species management with DAVE
The Herpes Virus as a biological control agent in the Murray-Darling Basin

The Case of the Carp
What is driving outrage?
Tracing the social maturity of viruses

**NOMINATIVE**

**GOVERNANCE**

**CHALLENGE**

**POPULARISATION**

**EMERGENT**

**OBSERVATION**

- English chemist Ernest Hankin publishes article 'the bactericidal action of waters of Ganges and Ganges on the cholerae microbe', recognised by many authors as an early description of bacteriophages, but disputed by others.

- FDA approves the use of Listshield, a bacteriophage product, for direct application on foods, as well as a method of decontaminating surfaces in food processing facilities.

- Prophylactic use of phages shown to be effective in reducing mortality rates from cholera in India.

- First clinical trial meeting modern medical standards using phage therapy shows 92% of patients’ ailments were significantly alleviated and 25% were healed.

- Study shows phages can transform non-pathogenic E. coli into pathogenic E. coli.

- Reviews of phage therapy incorrectly conclude that phages are not living organisms, and suggest they are no more effective than other accepted preparations, effectively stopping all major studies on phages in the US.

- Report describes how antibiotics can trigger phages to react, making E. Coli pathogenic.

- EU funds phage research project called Phagoburn into use of phage treatment against infected burns. The EU hopes for the project to be used to optimise current regulatory guidelines in phage therapy.

- A review by molecular biologist Joshua Lederberg stresses the importance of additional research into the use of phages as an alternative to antibiotics.

- Interest in phage therapy develops in the United States.

- Penicillin manufactured for the first time to great success, with production increasing from 12 million to 6 trillion units in the following 3 years.
From DAD to DAVE

DAD

Decide → Announce → Defend

DAVE

Declare → Acknowledge → Vision → Evaluate
Shifting mindsets

FROM
“Right to operate mindset”

TO
“Social licence to operate mindset”