Lithobates catesbeianus

Date assessed: 2020-09-01
Year published: 2022
Eicat category: MO (Moderate)

Justification for EICAT assessment

Several studies have shown that the presence of *Lithobates catesbeianus* tadpoles replaced or reduced the abundance of local tadpoles through competition (Kupferberg, 1997; Laufer et al., 2008; Gobel et al., 2019). The presence of *L. catesbeianus* was also shown to reduce the developmental stage and size and ultimately fitness of local tadpoles (Hale et al., 2017). The presence of *L. catesbeianus* adults and tadpoles had a significant impact on the growth, development, and survivorship of *R. aurora* (D’Amore et al., 2009). Evidence was found that all stages (tadpoles, postmetamorphs, juveniles, and adults) of *L. catesbeianus* preyed on local amphibians (Hossack et al., 2017) and the presence of adult *L. catesbeianus* resulted in a significant decrease of local frog abundance (Li et al., 2015).
EICAT profile: Lithobates catesbeianus

Confidence rating: Low
Mechanism(s) of maximum impact: Predation; Competition
Countries of most severe impact: U.S.A.; Uruguay; China

Description of impact:
- Competition: L. catesbeiana tadpoles has a significant negative affect on the size, developmental stage, and rate of development of native tadpoles. This results in a reduction in the fecundity and abundance of the native species.
- Predation: All developmental stages of native species were shown to be preyed upon by the L. catesbeiana tadpoles, leading to a decline in the local population.

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