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Burmese pythons (*Python molurus bivittatus*) are native to southeastern Asia, however, there is an established invasive population inhabiting much of southern Florida throughout the Greater Everglades Ecosystem. Pythons in southern Florida represent one of the most intractable invasive-species management issues across the globe. The problem stems from a unique combination of inaccessible habitat with the cryptic and resilient nature of pythons that do well in a subtropical environment, which makes them extremely difficult to detect. Researchers have documented extensive direct alteration of the native food web by these giant constrictors over the past two decades, while extensively exploring methods to capture and remove this damaging species. However, very low individual detection probabilities for Burmese pythons remain the greatest obstacle to developing landscape-scale control programs. Here we provide a comprehensive review and synthesis of the science relevant to managing invasive Burmese pythons. We describe existing control tools and review challenges to productive research, identifying key knowledge gaps that would improve future research and decision making for python control.

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BURMESE PYTHONS IN FLORIDA: A SYNTHESIS OF BIOLOGY, IMPACTS, AND MANAGEMENT TOOLS

By

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