Use of Margarine for the Successful Removal of Polyisobutylene in an Anhinga (Anhinga anhinga) and Great Blue Heron (Ardea herodias)

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Abstract: Two great blue herons (Ardea herodias) and an anhinga (Anhinga anhinga) were presented to the Wildlife Center of Texas with extensive plumage soiling due to polyisobutylene (PIB), a synthetic rubber polymer used in manufacturing. All animals were provided supportive care and sedated for evaluation for hematologic and plasma biochemical values; one of the great blue herons was critically ill based on the diagnostic evaluations and died approximately 24 hours after admission. On postmortem examination, it was diagnosed with coelomic migration of Eustrongyloides species resulting in verminous peritonitis that was likely the primary cause of its poor condition and death rather than PIB exposure. Standard decontamination efforts with commercial liquid dish soap were unsuccessful. Application of margarine was used to emulsify the PIB on the remaining 2 birds and was followed by standard wash protocols for successful removal. These animals were successfully released after decontamination. The use of margarine for decontamination of PIB is unreported and could prove useful in future decontamination events in birds and other wildlife when traditional methods to remove hydrocarbon compounds are unsuccessful.