

INTEGRATION AND SYNTHESIS WORKSHEET: CONUS Animal Species

Note to Service biologists: Use the following ranking indicators as a starting point for determining consequences of the action to listed species.

Factors	Indicator	Selection
VULNERABILITY		
Listing status, with 5-year status review recommendation (if recent, within last 5 years)	High = E, PE, or T with 5-yr review uplisting recommendation; Medium = C, T, PT, or E with 5-yr review downlisting recommendation; Low = 5-yr review delisting recommendation	Choose an item.
Vulnerability factor: distribution	High = Small, endemic, constrained, and/or isolated population(s); Medium = Species/Populations neither constrained nor widespread; Population size/location unknown; Low = Species/Populations widespread or wide-ranging	Choose an item.
Vulnerability factor: # populations	High = Single population; Medium = Multiple populations (few), Population size/location(s) unknown; Low = Multiple populations (numerous)	Choose an item.
Vulnerability factor: species trends	High = Declining population(s) – one or more populations declining; Medium = All populations stable, with none known to be increasing or decreasing; Unknown population trends; Low = Increasing population(s)	Choose an item.
Pesticides identified as a threat (in a listing rule, 5-year status review or recovery plan)?	High = Pesticides, contaminants that may include pesticides or water quality are noted threats; Medium = no mention or not identified as a threat; no Low category	Choose an item.
Environmental Baseline/Cumulative Effects (effects of future state or private activities reasonably certain to occur within the project area)	High = More adverse effects anticipated overall; Medium = Unknown; Known with no significant adverse effects; roughly proportional adverse and beneficial effects anticipated; Low = More beneficial effects anticipated overall (e.g., recovery actions, reduced threats and stressors)	Choose an item.
Overall Rank: VULNERABILITY	High ranking: <ul style="list-style-type: none"> • All factors score high Medium ranking: <ul style="list-style-type: none"> • All factors score medium • Mix of high and low scores 	Choose an item.

Factors	Indicator	Selection
	<ul style="list-style-type: none"> ○ If 'Status' score is low, then overall ranking is Low ○ If 'Status' score is high, then overall ranking is High <p>Low ranking:</p> <ul style="list-style-type: none"> ● All factors score low 	
EXPOSURE		
Overlap	Low: 0-5%, Medium:5-10%; High: >10%	Choose an item.
Usage	Low: 0-5%; Medium:5-10%; High: >10%	Choose an item.
Additional exposure considerations	Census of Agriculture (CoA) all insecticide usage, CalPUR AI-specific usage, existing protections, management, conservation actions, etc.	
Overall Exposure	<p>High ranking:</p> <ul style="list-style-type: none"> ● high overlap with medium or high usage; <p>Medium ranking:</p> <ul style="list-style-type: none"> ● medium overlap with medium or low usage <p>Low ranking:</p> <ul style="list-style-type: none"> ● low overlap, or ● medium or high overlap with low CoA or CalPUR 	Choose an item.
TOXICITY		
Direct toxic effects	Low: % acute effect; Medium: % acute effect; High: % acute effect	Choose an item.
Indirect Effects	<p>Low: minimal adverse effects to prey/food resources</p> <p>Medium: mix of high levels of adverse effects and low levels of adverse effects to different food resources</p> <p>High: high levels of adverse effects to all food resources</p>	Choose an item.

Factors	Indicator	Selection
Additional toxicity considerations	Alternative toxicity endpoints, alternative dietary items, life history traits or behaviors that would affect the overall toxicity	
Overall Rank: TOXICITY	<p>High ranking:</p> <ul style="list-style-type: none"> • high direct adverse effects, or • medium direct adverse effects with high indirect adverse effects <p>Medium ranking:</p> <ul style="list-style-type: none"> • Medium direct adverse effects with medium or low indirect adverse effects, or • low direct adverse effects with high indirect adverse effects <p>Low ranking:</p> <ul style="list-style-type: none"> • low direct adverse effects and medium to low indirect adverse effects 	Choose an item.