

NAME OF SPECIES: Martes foina	
Synonyms:	
Common Name: Stone marten, beech marten	
A. CURRENT STATUS AND DISTRIBUTION	
I. In Wisconsin?	1. YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
	2. <u>Abundance</u> : Minimal population established in southeast Wisconsin.
	3. <u>Geographic Range</u> : Found around the Southern Unit of Kettle Moraine State Forest. Found in four counties: Jefferson, Racine, Waukesha and Walworth.
	4. <u>Habitat Invaded</u> : This species is found around humans (2). Disturbed Areas <input checked="" type="checkbox"/> Undisturbed Areas <input type="checkbox"/>
	5. <u>Historical Status and Rate of Spread in Wisconsin</u> : The stone marten was brought to the Wisconsin as a commercial furbearer venture. Stone martens were released and/or escaped in about 1972 and have established wild populations.
	6. <u>Proportion of potential range occupied</u> : Minimal range expansion over 35 years. These animals establish home ranges and stay in their home range. They are territorial.
	7. <u>Reproducing Naturally</u> : The Wisconsin DNR stated that they are not sure if this species is reproducing in Wisconsin or not. <u>Anecdotal</u> stories from various people indicate that they are reproducing in Wisconsin, but DNR findings are inconclusive.
II. Invasive in Similar Climate Zones	1. YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> <u>Where (include trends)</u> : These animals are found in open areas near homesteads. Wisconsin is the only place this animal is found in the United States (1,2).
III. Invasive in Similar Habitat Types	1. Upland <input type="checkbox"/> Wetland <input type="checkbox"/> Dune <input type="checkbox"/> Prairie <input type="checkbox"/> Aquatic <input type="checkbox"/> Forest <input type="checkbox"/> Grassland <input type="checkbox"/> Bog <input type="checkbox"/> Fen <input type="checkbox"/> Swamp <input type="checkbox"/> Marsh <input type="checkbox"/> Lake <input type="checkbox"/> Stream <input type="checkbox"/> Other: Stone Martens are found in open deciduous forests, and rock outcroppings (1). They do not require the large forest component as other Martens do (1). In Europe Stone Martens prefer shrubs, brushy areas and found to avoid large homogenous forests (2).
IV. Habitat Affected	1. <u>Where does this invasive resided</u> : Edge species <input checked="" type="checkbox"/> Interior species <input type="checkbox"/>
	2. <u>Conservation significance of threatened habitats</u> : These animals do not reside in threatened habitats.
V. Native Habitat	1. <u>List countries and native habitat types</u> : These animals are found throughout Europe and central Asia in rocky, open areas. Found in mountains up to 4000 meters (3).
VI. Legal Classification	1. <u>Listed by government entities?</u> These animals are not listed by any entities.
	2. <u>Illegal to sell?</u> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> Notes: They were brought into Wisconsin as a commercial furbearer.
B. ESTABLISHMENT POTENTIAL AND LIFE HISTORY TRAITS	
I. Life History	1. <u>Type of Animal</u> : Mammal <input checked="" type="checkbox"/> Bird <input type="checkbox"/> Reptile <input type="checkbox"/>

	<p>Amphibian <input type="checkbox"/> Fish <input type="checkbox"/></p> <p>2. <u>Age of Maturity or Time of self sufficient</u>: Stone Martens become self-sufficient at the end of the summer of the year in which they are born (1)</p> <p>3. <u>Gestation Period</u>: Total period of pregnancy lasts from 230-275 days (3). This is because these animals have delayed implantation. Copulation occurs between June to August, but implantation starts in February. From the time implantation occurs until birth, true gestation taking about 1 month.</p> <p>4. Mating System: Polygamous <input type="checkbox"/> Polyandrous X Monogamous <input type="checkbox"/></p> <p><u>Notes</u>:</p> <p>5. <u>Breeding period</u>: Stone martens breed between June and August.</p> <p>6. <u>Hybridization potential</u>: No information.</p>
II. Climate	<p>1. <u>Climate restrictions</u>: No information.</p> <p>2. <u>Effects of potential climate change</u>: No information.</p>
III. Dispersal Potential	<p>1. <u>Pathways - Please check all that apply</u>:</p> <p><u>Unintentional</u>: Bird <input type="checkbox"/> Animal <input type="checkbox"/> Vehicles/Human <input type="checkbox"/> Wind <input type="checkbox"/> Water <input type="checkbox"/> Other:</p> <p><u>Intentional</u>: Ornamental <input type="checkbox"/> Forage/Erosion control <input type="checkbox"/> Medicine/Food: Recreational <input type="checkbox"/> Other: Fur industry</p> <p>2. <u>Distinguishing characteristics that aid in its survival and/or inhibit its control</u>: Adapts to living around humans, including living in human-occupied buildings (3).</p>
IV. Ability to go Undetected	<p>1. HIGH <input type="checkbox"/> MEDIUM X LOW <input type="checkbox"/> This is a very solitary animal, and nocturnal (1, 2). This marten has adapted to living around humans.</p>
C. DAMAGE POTENTIAL	
I. Competitive Ability	<p>1. <u>Presence of Natural Enemies</u>: Red fox (<i>Vulpes vulpes</i>), coyotes, owls, cats.</p> <p>2. <u>Competition with native species</u>: There was no real information on this. This marten prefers human-altered environments. This species feeds on rabbits, chickens, young chicks, eggs and fruit, but there is no information if they significantly compete with native species (1).</p> <p>2. Rate of Spread: -changes in relative dominance over time: -change in acreage over time: HIGH(1-3 yrs) <input type="checkbox"/> MEDIUM (4-6 yrs) <input type="checkbox"/> LOW (7-10 yrs) X Notes: Stone martens have been in the wild in southeast WI for about 35 years and have not appreciably expanded their range.</p>
II. Environmental Effects	<p>1. <u>Alteration of ecosystem/community composition?</u> YES <input type="checkbox"/> NO X</p>

	Notes:
	2. <u>Alteration of ecosystem/community structure?</u> YES <input type="checkbox"/> NO X Notes:
	3. <u>Alteration of ecosystem/community functions and processes?</u> YES <input type="checkbox"/> NO X Notes:
	4. <u>Exhibit Parasitism?</u> YES <input type="checkbox"/> NO X Notes:
D. SOCIO-ECONOMIC EFFECTS	
I. Positive aspects of the species to the economy/society:	Notes: They will eat nuisance pests, such as rats and mice, around households (1). Pelts can be sold for money.
II. Potential Socio-Economic Effects of Requiring Controls: Positive: Negative:	Notes: Minimal loss of money in pet trade industry.
III. Direct and Indirect Socio-Economic Effects of the Animal :	Notes: This animal eats nuisance animals, but will raid chicken coops (1) .
IV. Increased Costs to Sectors Caused by the Animal:	Notes: Poultry losses. The animals could take up residency in people's homes causing destruction to houses.
V. Effects on Human Health:	Notes: These animals are carnivores and carnivores have many diseases, but there is nothing out of the ordinary.
VI. Potential Socio-Economic Effects of Restricting Use:	Positive: No longer prey upon poultry. Negative: Potential loss of money in the pet trade, and a predator to nuisance species, like mice and rats.
E. CONTROL AND PREVENTION	
I. Costs of Prevention (please be as specific as possible):	Notes: The population is small, so if one could find these individuals and remove them the cost should not be substantial.
II. Responsiveness to Prevention Efforts:	Notes: The response to trapping stone martens should be high if animal is trapped properly.
III. Effective Control Tactics:	Mechanical X Biological <input type="checkbox"/> Chemical <input type="checkbox"/> Times and uses: Around breeding time, June through August. Also set the traps at night.
IV. Minimum Effort:	Notes: Set traps and monitor them.
V. Costs of Control:	Notes: The price for human labor, travel, and trapping supplies.
VI. Cost of Prevention or Control vs. Cost of Allowing Invasion to Occur:	Notes: These animals do not seem to be a threat at this time, but the cost of control should not be substantial.
VII. Non-Target Effects of Control:	Notes: One may not catch the species they want, but if one is using live traps, then incidental captures can be released unharmed.
VIII. Efficacy of Monitoring:	Notes: Look for tracks and scat around farms and rural dwellings in suspect areas. Communicate with trappers and outdoor enthusiasts.
IX. Legal and Landowner Issues:	Notes: None evident.

F. REFERENCES :

Number	Reference
1	Carter, K. and P. Myers. 2004. "Martes foina" (On-line), Animal Diversity Web. Accessed July 03, 2007 at http://animaldiversity.ummz.umich.edu/site/accounts/information/Martes_foina.html .
2	Sacchi, Oreste. and Alberto Meriggi. 1995. Habitat Requirement of the Stone Marten (Martes foina) on the Tyrrhenian Slopes of the Northern Appenies. Hystrix 7 pp 99-104. Dipartinzento di Biologia Aniniale, Università di Pavia, Piazza Botta 927100 Pnvia, Italy
3	Nowak, R.M. 1999. Walker's Mammals of the World. Johns Hopkins University Press. Baltimore and London.

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