

Appendix A.—Distribution maps, in taxonomic order, for the 119 species of Michigan fishes collected 1993–2001.

Common name (family)	Scientific name	Page number
Lampreys (Petromyzontidae)		
Chestnut lamprey	<i>Ichthyomyzon castaneus</i> Girard	47
Northern brook lamprey	<i>Ichthyomyzon fossor</i> Reighard & Cummins	47
Silver lamprey	<i>Ichthyomyzon unicuspis</i> Hubbs & Trautman	47
American brook lamprey	<i>Lampetra appendix</i> (DeKay)	47
Sturgeons (Acipenseridae)		
Lake sturgeon	<i>Acipenser fulvescens</i> Rafinesque	48
Gars (Lepisosteidae)		
Spotted gar	<i>Lepisosteus oculatus</i> (Winchell)	49
Longnose gar	<i>Lepisosteus osseus</i> (Linnaeus)	49
Bowfins (Amiidae)		
Bowfin	<i>Amia calva</i> Linnaeus	50
Herrings (Clupeidae)		
Alewife	<i>Alosa pseudoharengus</i> (Wilson)	51
Gizzard shad	<i>Dorosoma cepedianum</i> (Lesueur)	52
Carp and Minnows (Cyprinidae)		
Central stoneroller	<i>Campostoma anomalum pullum</i> (Agassiz)	53
Goldfish	<i>Carassius auratus</i> (Linnaeus)	54
Redside dace	<i>Clinostomus elongatus</i> (Kirtland)	55
Lake chub	<i>Couesius plumbeus</i> (Agassiz)	56
Spotfin shiner	<i>Cyprinella spiloptera</i> (Cope)	57
Common carp	<i>Cyprinus carpio</i> Linnaeus	58
Brassy minnow	<i>Hybognathus hankinsoni</i> Hubbs	59
Striped shiner	<i>Luxilus chrysocephalus</i> Rafinesque	60
Common shiner	<i>Luxilus cornutus</i> (Mitchill)	61
Redfin shiner	<i>Lythrurus umbratilis</i> (Girard)	62
Northern pearl dace	<i>Margariscus nachtriebi</i> (Cox)	63
Hornyhead chub	<i>Nocomis biguttatus</i> (Kirtland)	64
River chub	<i>Nocomis micropogon</i> (Cope)	65
Golden shiner	<i>Notemigonus crysoleucas</i> (Mitchill)	66
Pugnose shiner	<i>Notropis anogenus</i> Forbes	67
Emerald shiner	<i>Notropis atherinoides</i> Rafinesque	68
Silverjaw shiner	<i>Notropis buccatus</i> (Cope)	69
Ghost shiner	<i>Notropis buechanani</i> Meek	70
Bigmouth shiner	<i>Notropis dorsalis</i> (Agassiz)	71
Blackchin shiner	<i>Notropis heterodon</i> (Cope)	72
Blacknose shiner	<i>Notropis heterolepis</i> Eigenmann & Eigenmann	73
Spottail shiner	<i>Notropis hudsonius</i> (Clinton)	74
Silver shiner	<i>Notropis photogenis</i> (Cope)	75
Rosyface shiner	<i>Notropis rubellus</i> (Agassiz)	76
Sand shiner	<i>Notropis stramineus</i> (Cope)	77
Mimic shiner	<i>Notropis volucellus</i> (Cope)	78

Appendix A.–Continued.

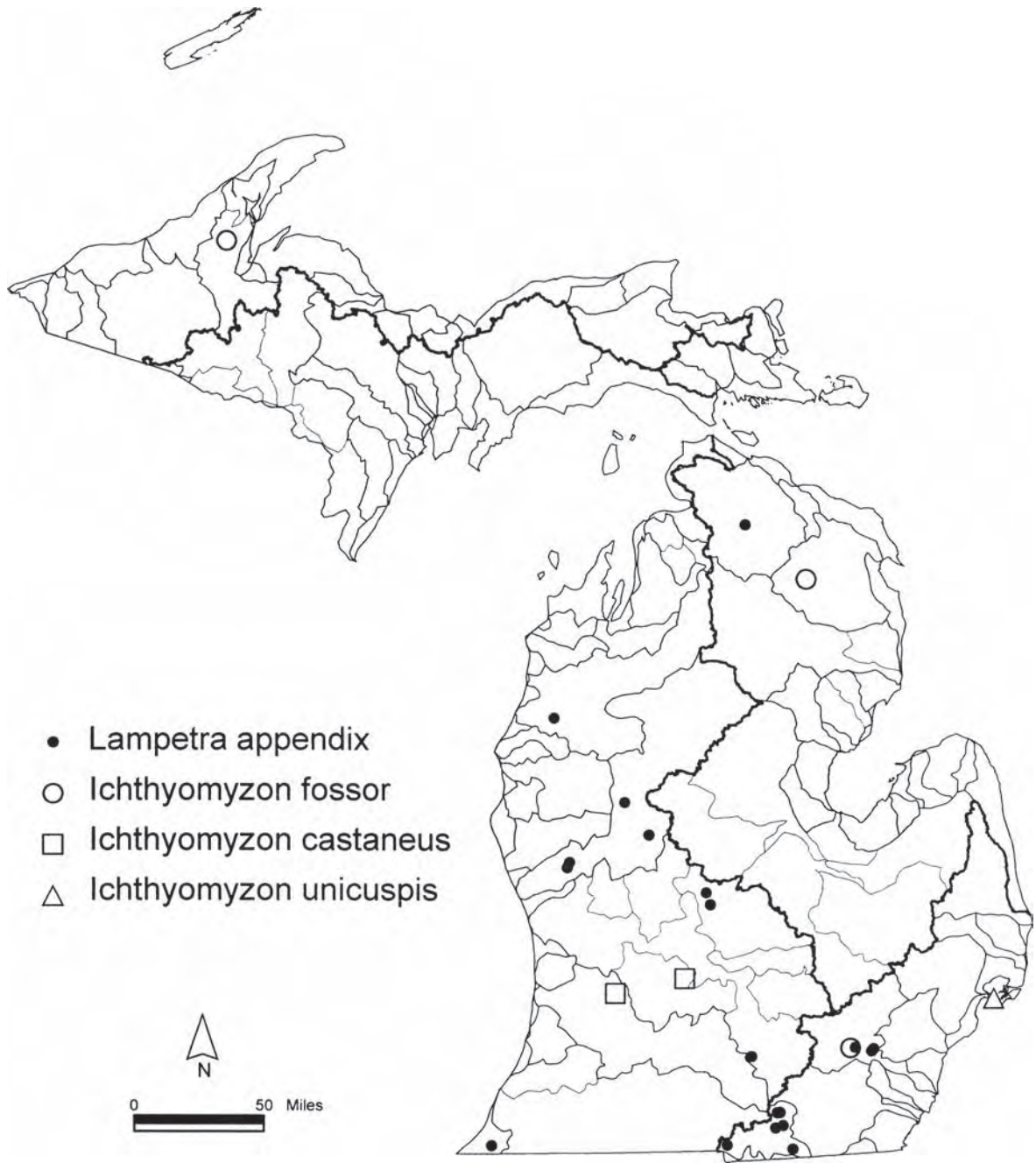
Common name (family)	Scientific name	Page number
Pugnose minnow	<i>Opsopoeodus emiliae</i> Hay	79
Suckermouth minnow	<i>Phenacobius mirabilis</i> (Girard)	79
Northern redbelly dace	<i>Phoxinus eos</i> (Cope)	80
Finescale dace	<i>Phoxinus neogaeus</i> Cope	81
Bluntnose minnow	<i>Pimephales notatus</i> (Rafinesque)	82
Fathead minnow	<i>Pimephales promelas</i> Rafinesque	83
Longnose dace	<i>Rhinichthys cataractae</i> (Valenciennes)	84
Blacknose dace	<i>Rhinichthys obtusus</i> Agassiz	85
Creek chub	<i>Semotilus atromaculatus</i> (Mitchill)	86
Suckers (Catostomidae)		
Quillback	<i>Carpionodes cyprinus</i> (Lesueur)	87
Longnose sucker	<i>Catostomus catostomus</i> (Forster)	88
White sucker	<i>Catostomus commersonii</i> (Lacepède)	88
Lake chubsucker	<i>Erimyzon sucetta</i> (Lacepède)	89
Northern hog sucker	<i>Hypentelium nigricans</i> (Lesueur)	90
Spotted sucker	<i>Minytrema melanops</i> (Rafinesque)	87
Silver redhorse	<i>Moxostoma anisurum</i> (Rafinesque)	91
Black redhorse	<i>Moxostoma duquesnei</i> (Lesueur)	92
Golden redhorse	<i>Moxostoma erythrurum</i> (Rafinesque)	93
Shorthead redhorse	<i>Moxostoma macrolepidotum</i> (Lesueur)	94
Greater redhorse	<i>Moxostoma valenciennesi</i> Jordan	95
Bullhead catfishes (Ictaluridae)		
Black bullhead	<i>Ameiurus melas</i> (Rafinesque)	96
Yellow bullhead	<i>Ameiurus natalis</i> (Lesueur)	97
Brown bullhead	<i>Ameiurus nebulosus</i> (Lesueur)	98
Channel catfish	<i>Ictalurus punctatus</i> (Rafinesque)	99
Stonecat	<i>Noturus flavus</i> Rafinesque	100
Tadpole madtom	<i>Noturus gyrinus</i> (Mitchill)	101
Brindled madtom	<i>Noturus miurus</i> Jordan	101
Pikes (Esocidae)		
Grass pickerel	<i>Esox americanus vermiculatus</i> Lesueur	102
Northern pike	<i>Esox lucius</i> Linnaeus	103
Muskellunge	<i>Esox masquinongy</i> Mitchill	103
Mudminnows (Umbridae)		
Central mudminnow	<i>Umbra limi</i> (Kirtland)	104
Smelts (Osmeridae)		
Rainbow smelt	<i>Osmerus mordax</i> (Mitchill)	105
Trouts (Salmonidae)		
Lake whitefish	<i>Coregonus clupeaformis</i> (Mitchill)	106
Coho salmon	<i>Oncorhynchus kisutch</i> (Walbaum)	107
Rainbow trout	<i>Oncorhynchus mykiss</i> (Walbaum)	108
Chinook salmon	<i>Oncorhynchus tshawytscha</i> (Walbaum)	107
Brown trout	<i>Salmo trutta</i> Linnaeus	109
Brook trout	<i>Salvelinus fontinalis</i> (Mitchill)	109

Appendix A.—Continued.

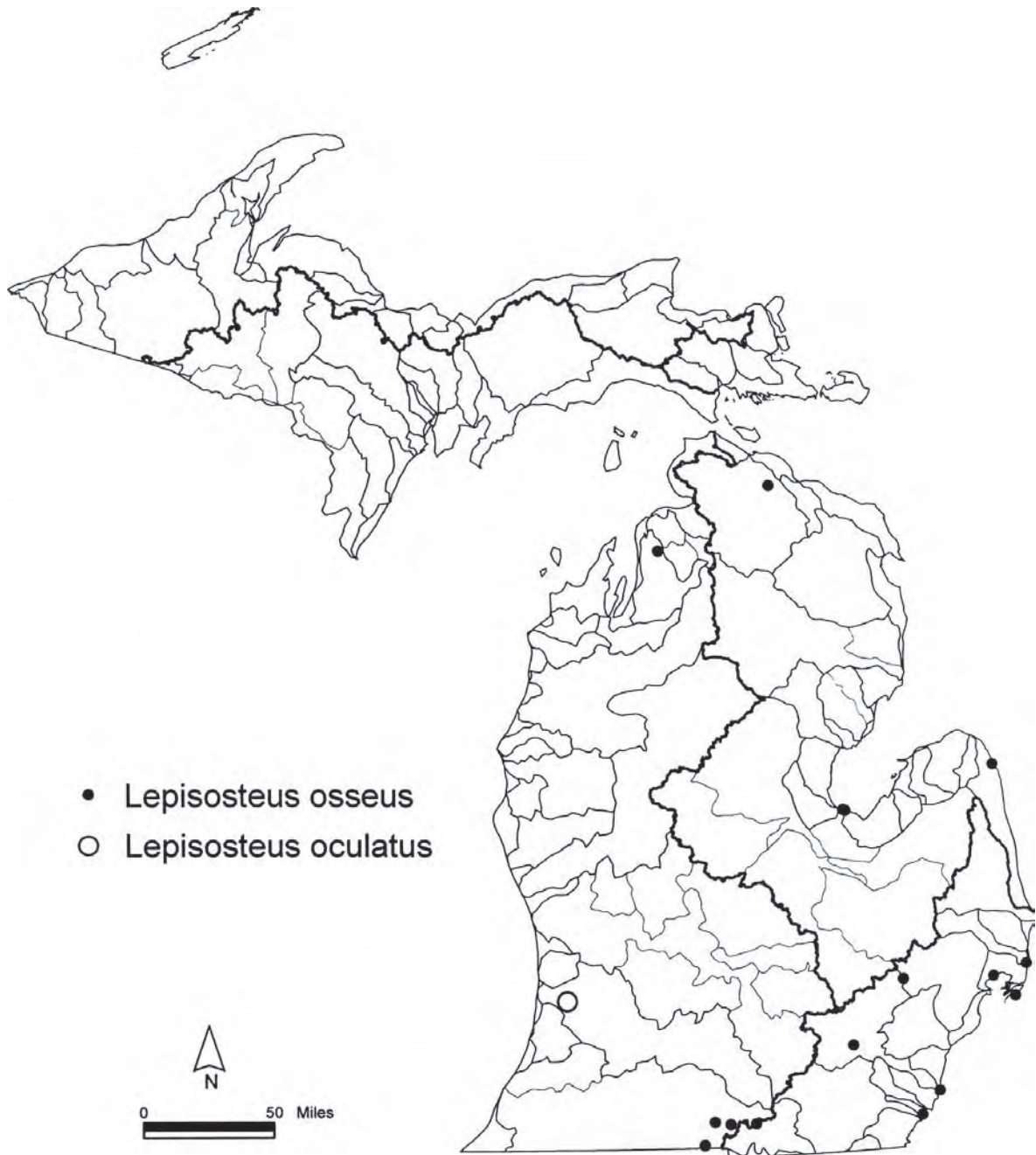
Common name (family)	Scientific name	Page number
Trout-perches (Percopsidae)		
Trout-perch	<i>Percopsis omiscomaycus</i> (Walbaum)	110
Pirate perches (Aphredoderidae)		
Pirate perch	<i>Aphredoderus sayanus</i> (Gilliams)	111
Cods (Gadidae)		
Burbot	<i>Lota lota</i> (Linnaeus)	112
Killifishes (Fundulidae)		
Banded killifish	<i>Fundulus diaphanous menona</i> (Jordan & Copeland)	113
Starhead topminnow	<i>Fundulus dispar</i> (Agassiz)	114
Blackstripe topminnow	<i>Fundulus notatus</i> (Rafinesque)	114
Silversides (Atherinidae)		
Brook silverside	<i>Labidesthes sicculus</i> (Cope)	115
Sticklebacks (Gasterosteidae)		
Brook stickleback	<i>Culaea inconstans</i> (Kirtland)	116
Threespine stickleback	<i>Gasterosteus aculeatus</i> Linnaeus	116
Ninespine stickleback	<i>Pungitius pungitius</i> (Linnaeus)	116
Sculpins (Cottidae)		
Mottled sculpin	<i>Cottus bairdii</i> Girard	117
Slimy sculpin	<i>Cottus cognatus</i> Richardson	118
Temperate basses (Moronidae)		
White perch	<i>Morone americana</i> (Gmelin)	119
White bass	<i>Morone chrysops</i> (Rafinesque)	120
Sunfishes (Centrarchidae)		
Rock bass	<i>Ambloplites rupestris</i> (Rafinesque)	121
Green sunfish	<i>Lepomis cyanellus</i> Rafinesque	122
Pumpkinseed	<i>Lepomis gibbosus</i> (Linnaeus)	123
Warmouth	<i>Lepomis gulosus</i> (Cuvier)	124
Orangespotted sunfish	<i>Lepomis humilis</i> (Girard)	124
Bluegill	<i>Lepomis macrochirus</i> Rafinesque	125
Redear sunfish	<i>Lepomis microlophus</i> (Günther)	126
Northern longear sunfish	<i>Lepomis peltastes</i> Cope	126
Smallmouth bass	<i>Micropterus dolomieu</i> Lacepède	127
Largemouth bass	<i>Micropterus salmoides</i> (Lacepède)	128
White crappie	<i>Pomoxis annularis</i> Rafinesque	129
Black crappie	<i>Pomoxis nigromaculatus</i> (Lesueur)	129
Perches (Percidae)		
Western sand darter	<i>Ammocrypta clara</i> Jordan & Meek	130
Eastern sand darter	<i>Ammocrypta pellucida</i> (Putnam)	130
Greenside darter	<i>Etheostoma blennioides</i> Rafinesque	131

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Common name (family)	Scientific name	Page number
Rainbow darter	<i>Etheostoma caeruleum</i> Storer	132
Iowa darter	<i>Etheostoma exile</i> (Girard)	133
Barred fantail darter	<i>Etheostoma flabellare flabellare</i> Rafinesque	134
Striped fantail darter	<i>Etheostoma flabellare lineolatum</i> (Agassiz)	134
Least darter	<i>Etheostoma microperca</i> Jordan & Gilbert	135
Johnny darter	<i>Etheostoma nigrum</i> Rafinesque	136
Orangethroat darter	<i>Etheostoma spectabile</i> (Agassiz)	135
Banded darter	<i>Etheostoma zonale</i> (Cope)	135
Yellow perch	<i>Perca flavescens</i> (Mitchill)	137
Northern logperch	<i>Percina caprodes semifasciata</i> (DeKay)	138
Channel darter	<i>Percina copelandi</i> (Jordan)	139
Blackside darter	<i>Percina maculata</i> (Girard)	140
Walleye	<i>Sander vitreus</i> (Mitchill)	141
Drums (Sciaenidae)		
Freshwater drum	<i>Aplodinotus grunniens</i> Rafinesque	142
Gobies (Gobiidae)		
Round goby	<i>Neogobius melanostomus</i> (Pallas)	143
Tubenose goby	<i>Proterorhinus marmoratus</i> (Pallas)	144



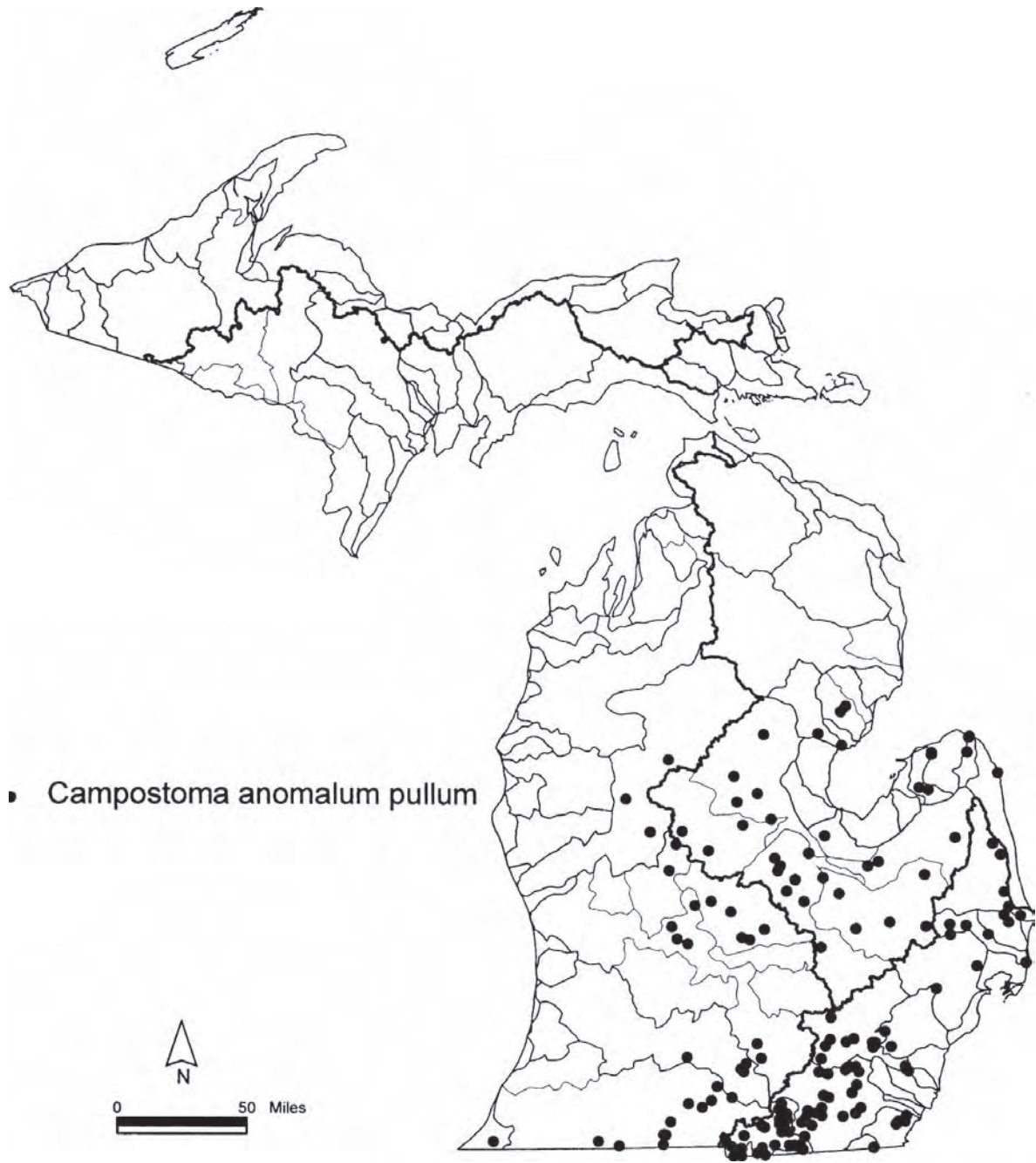








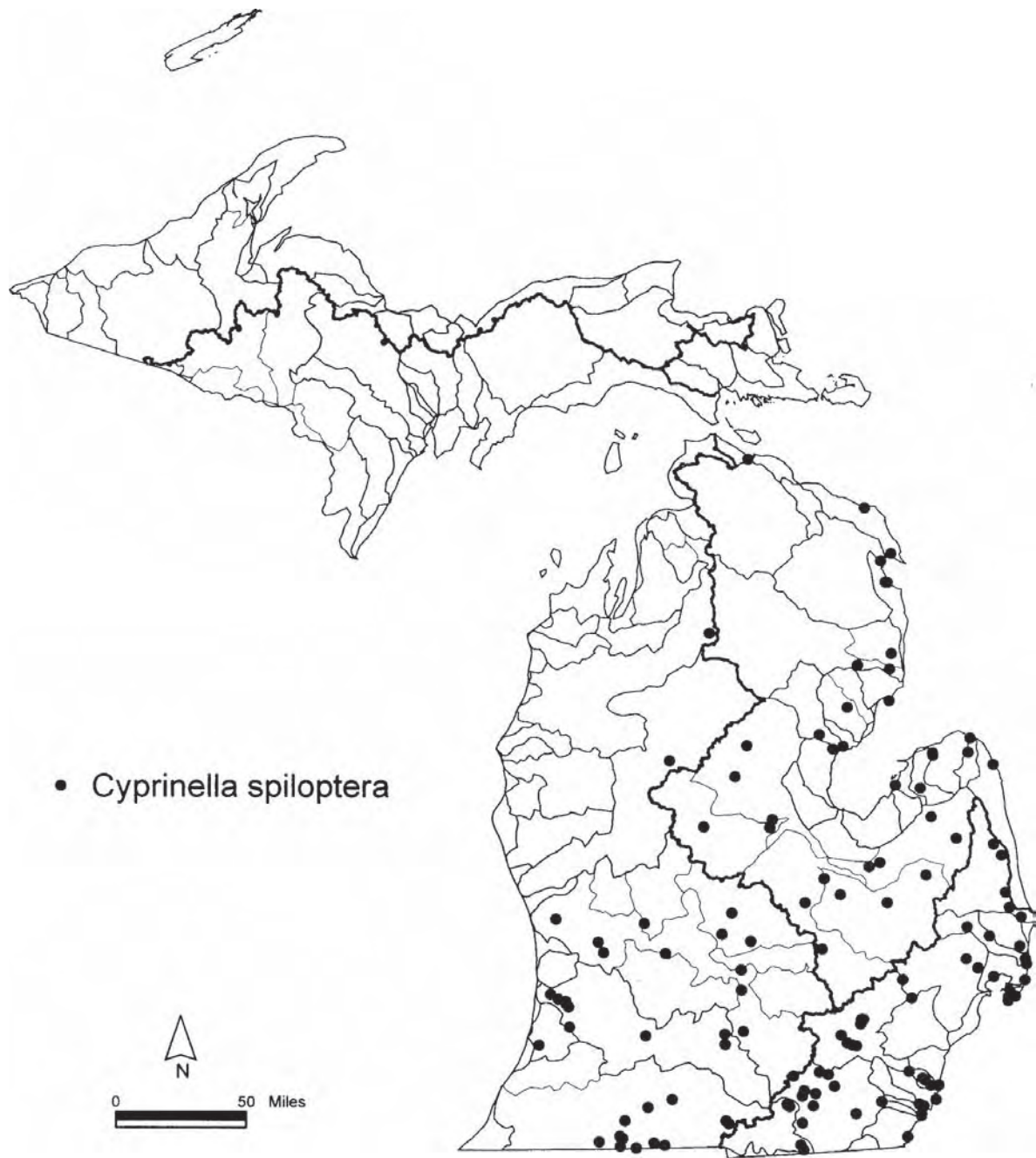




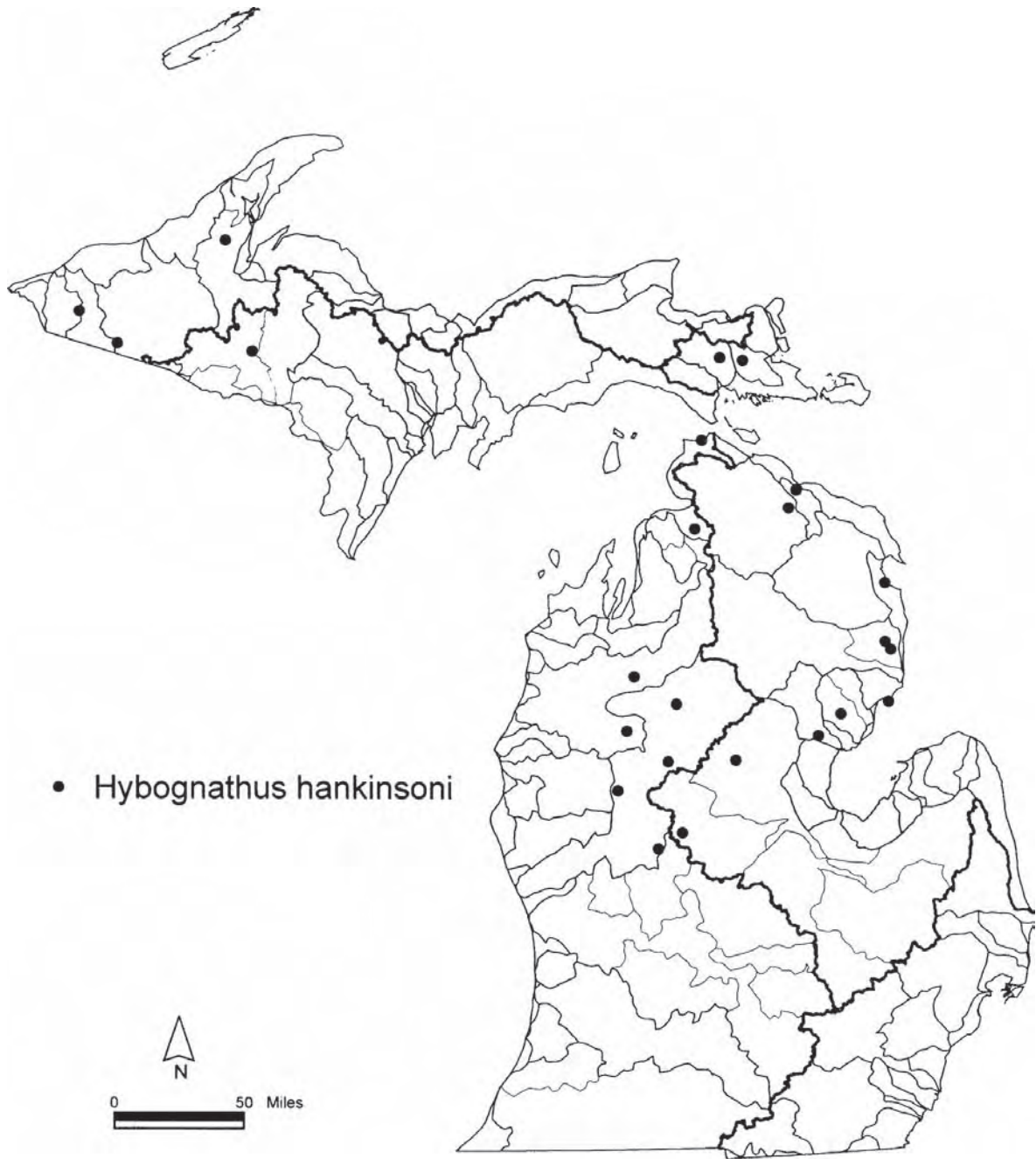


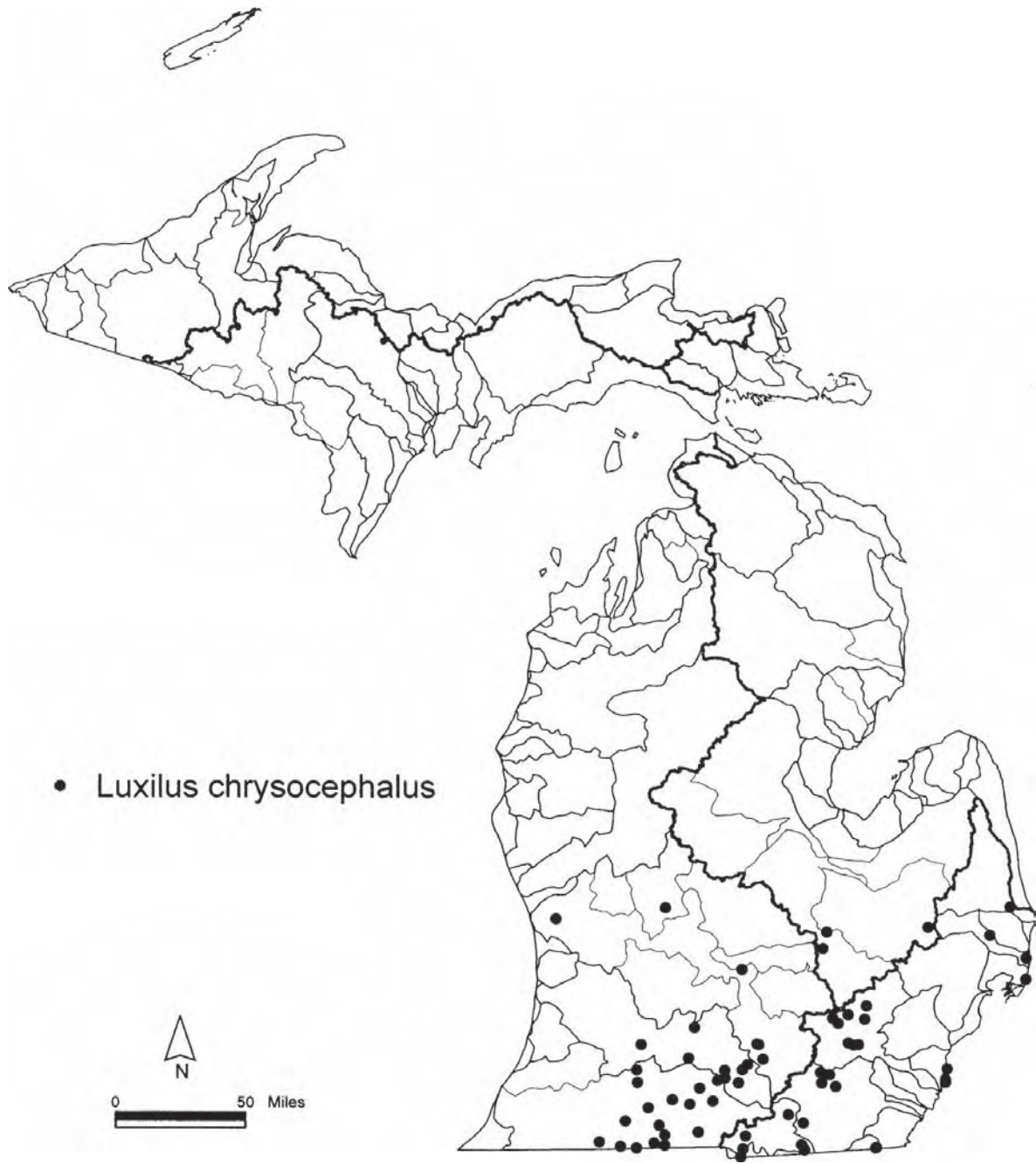




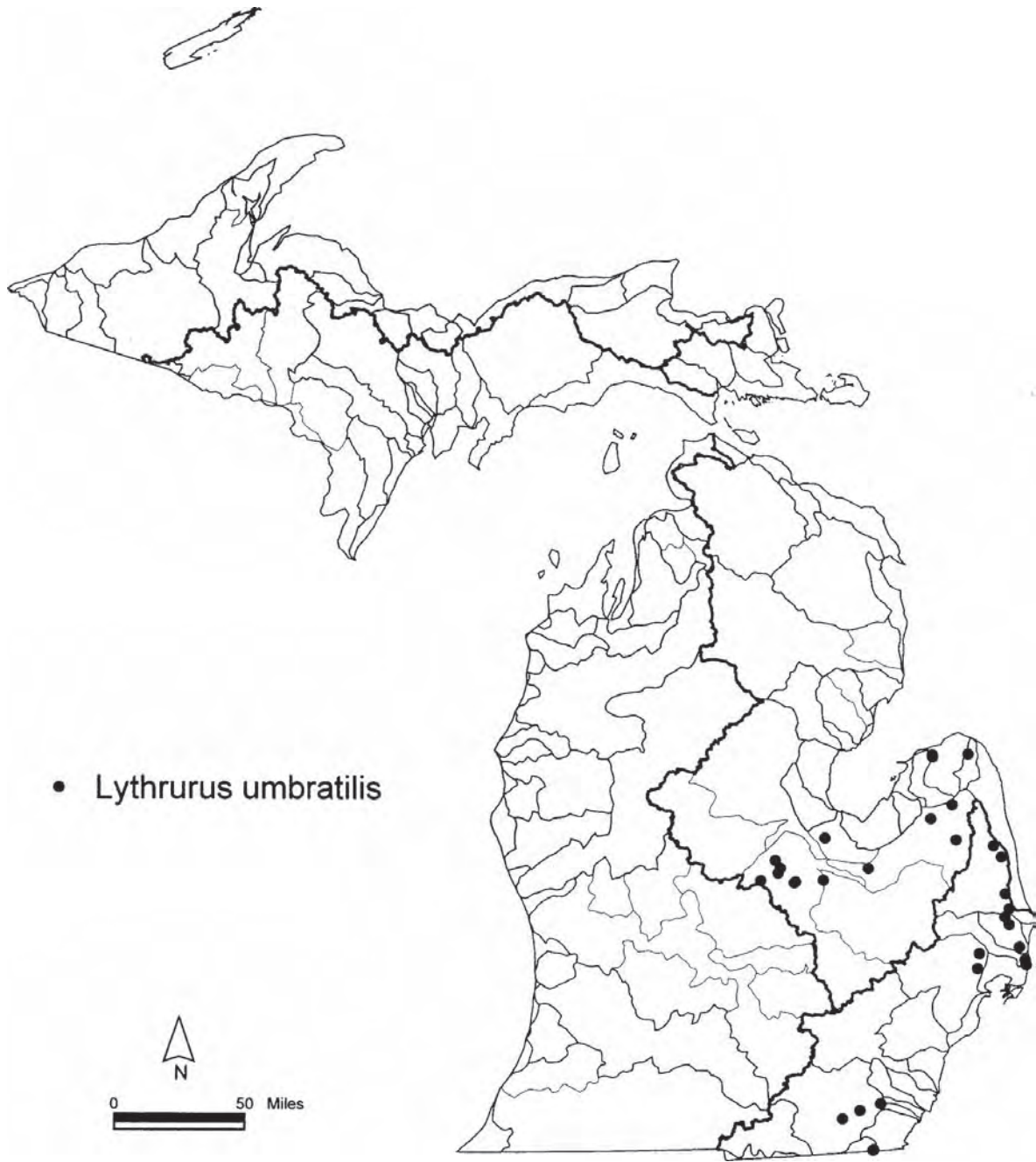




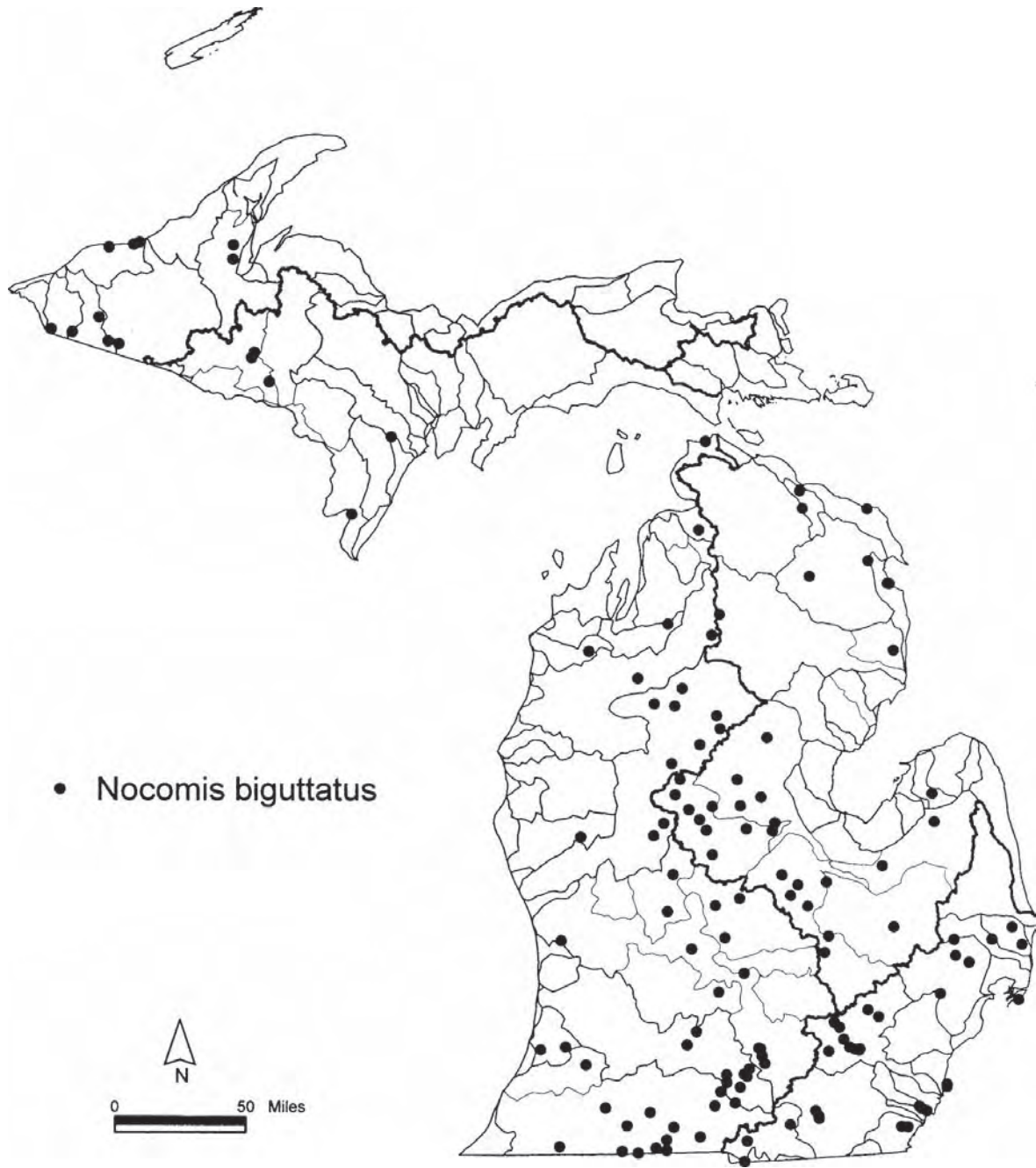


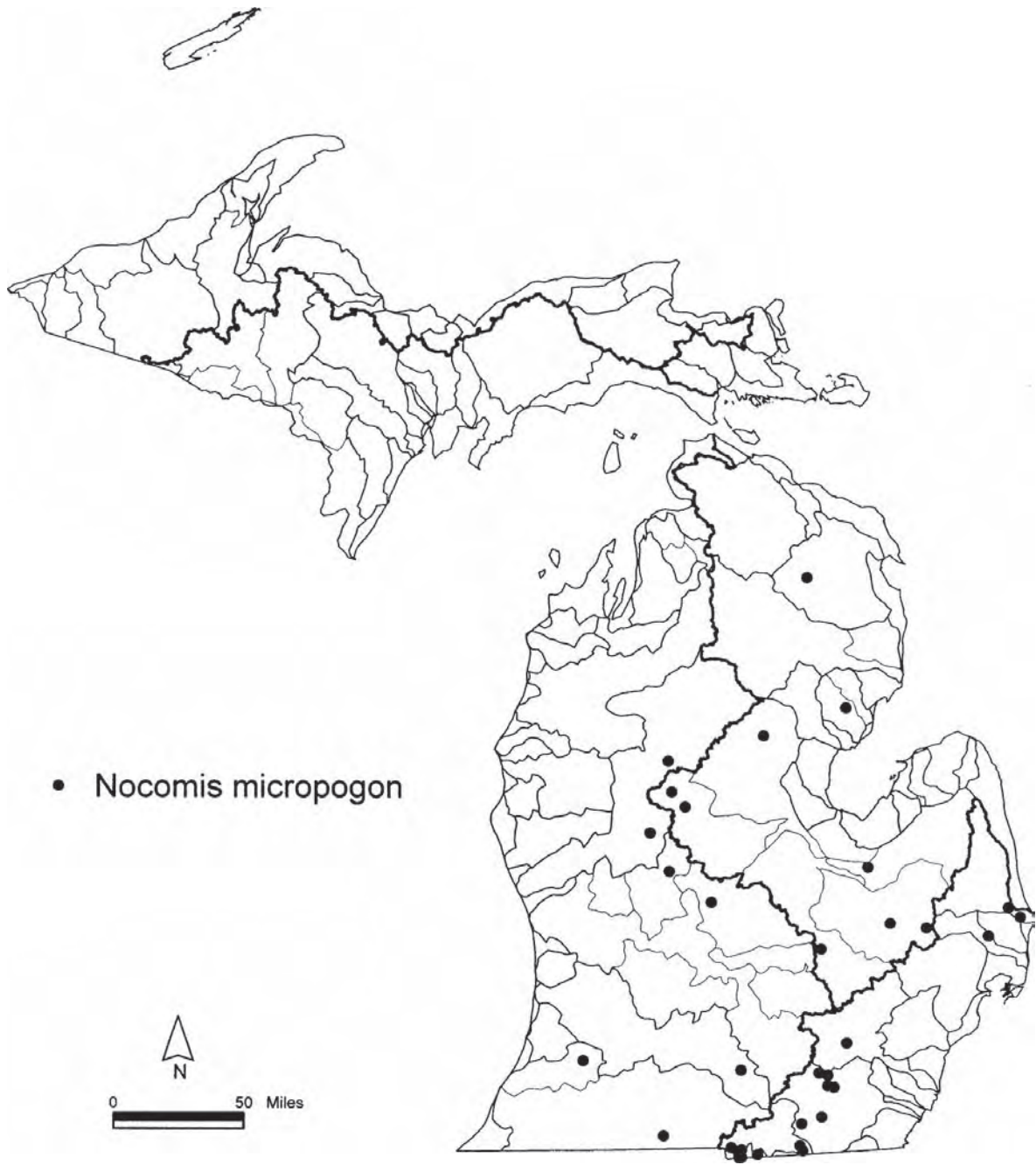


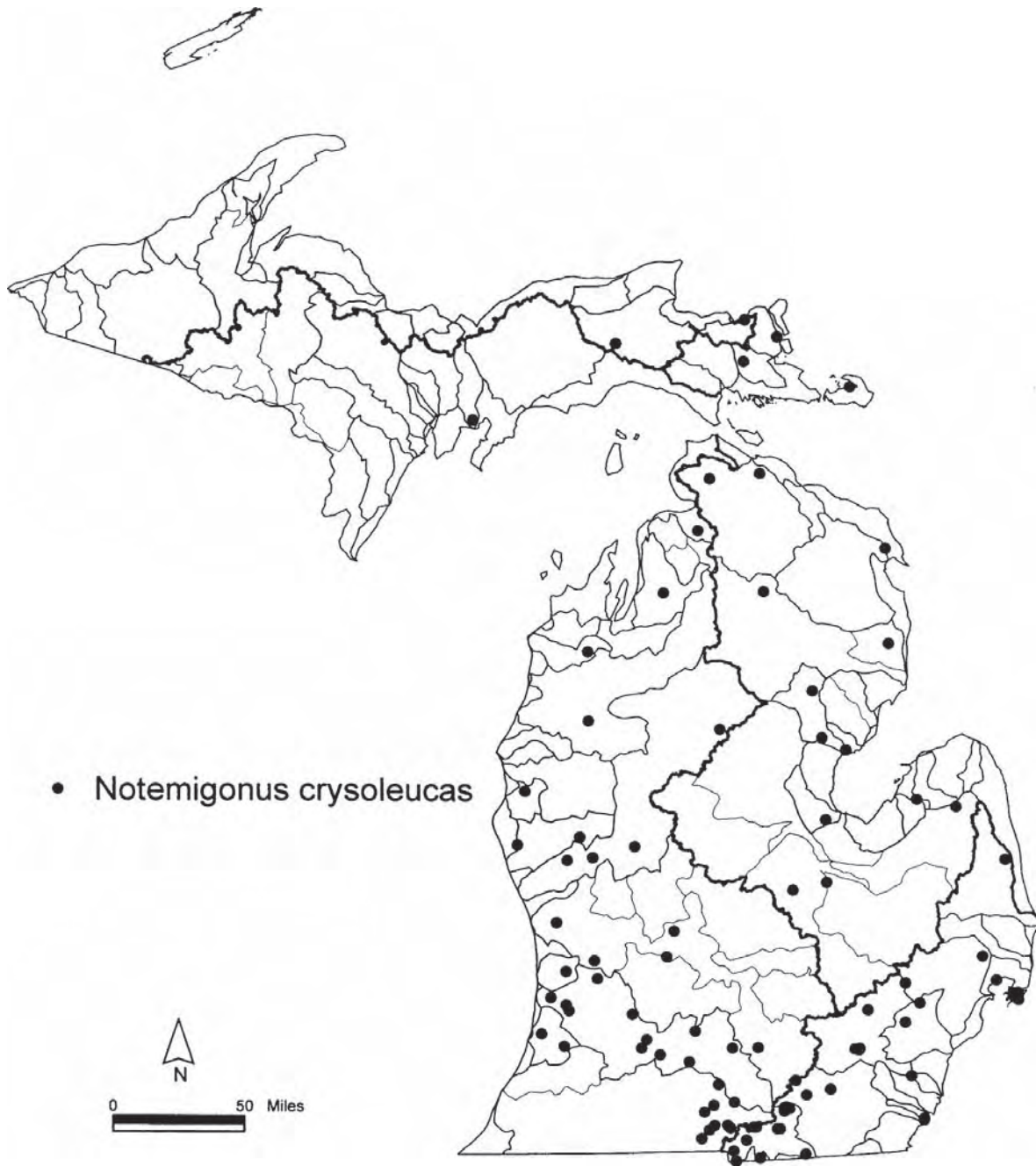


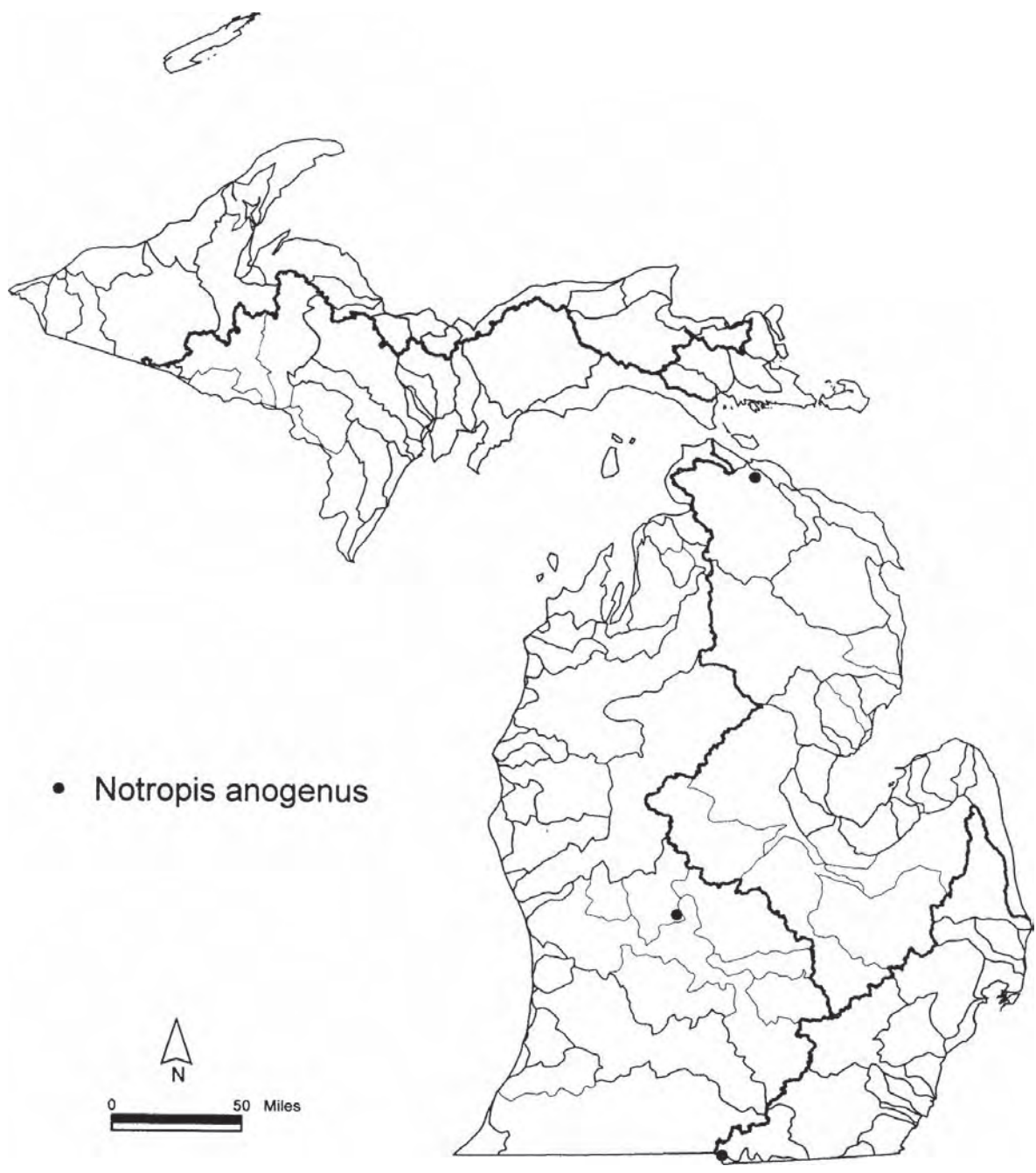






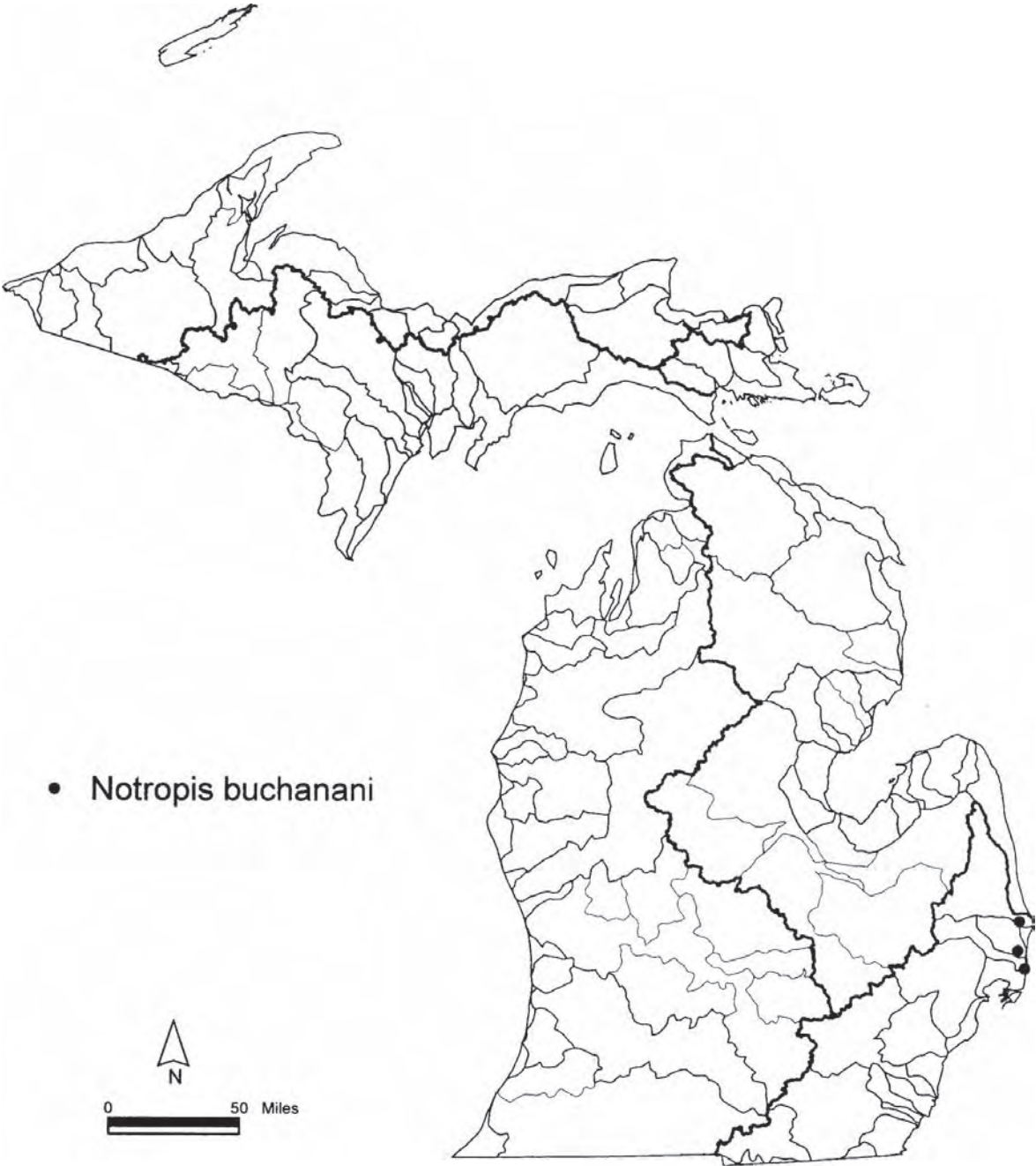




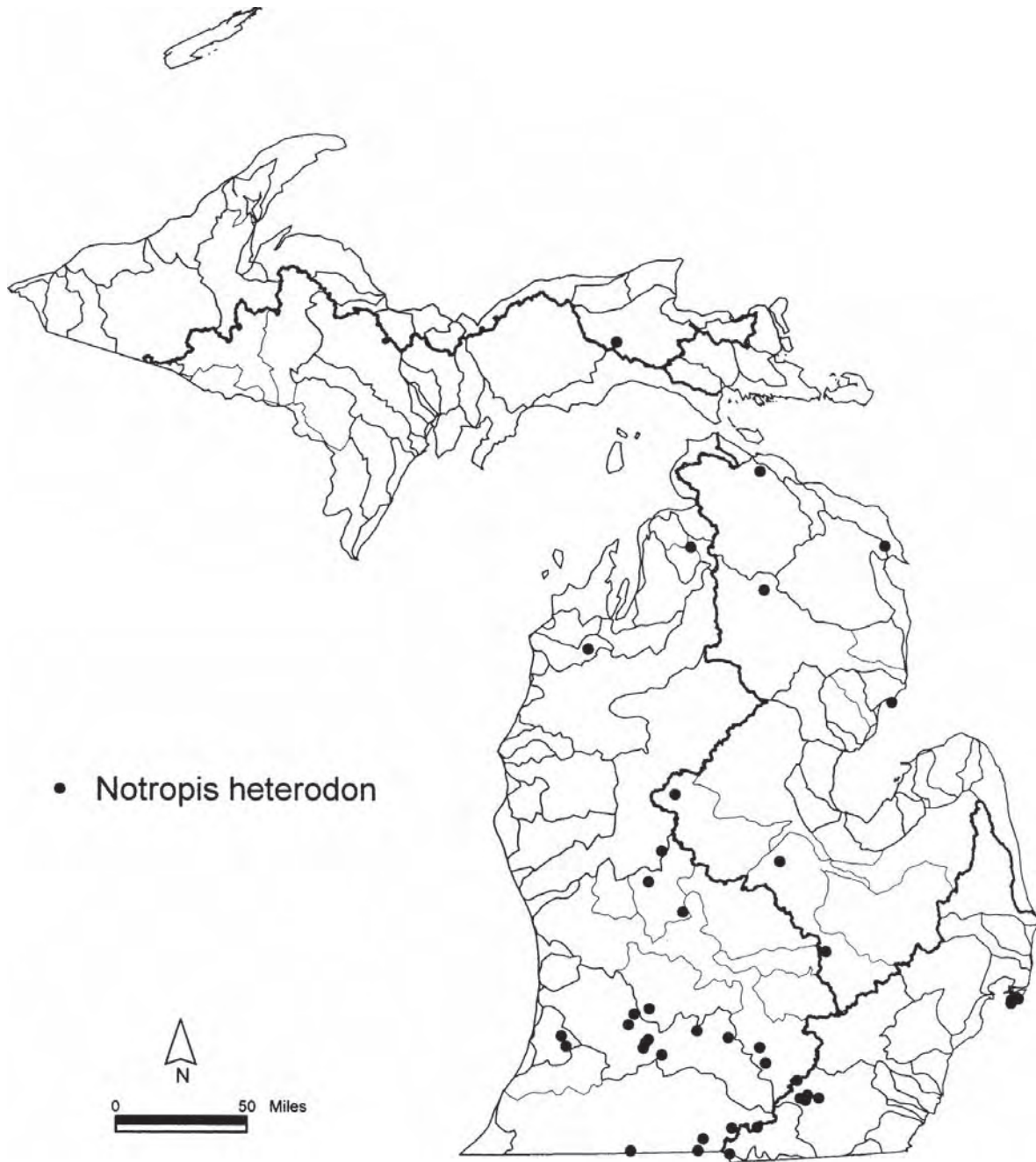


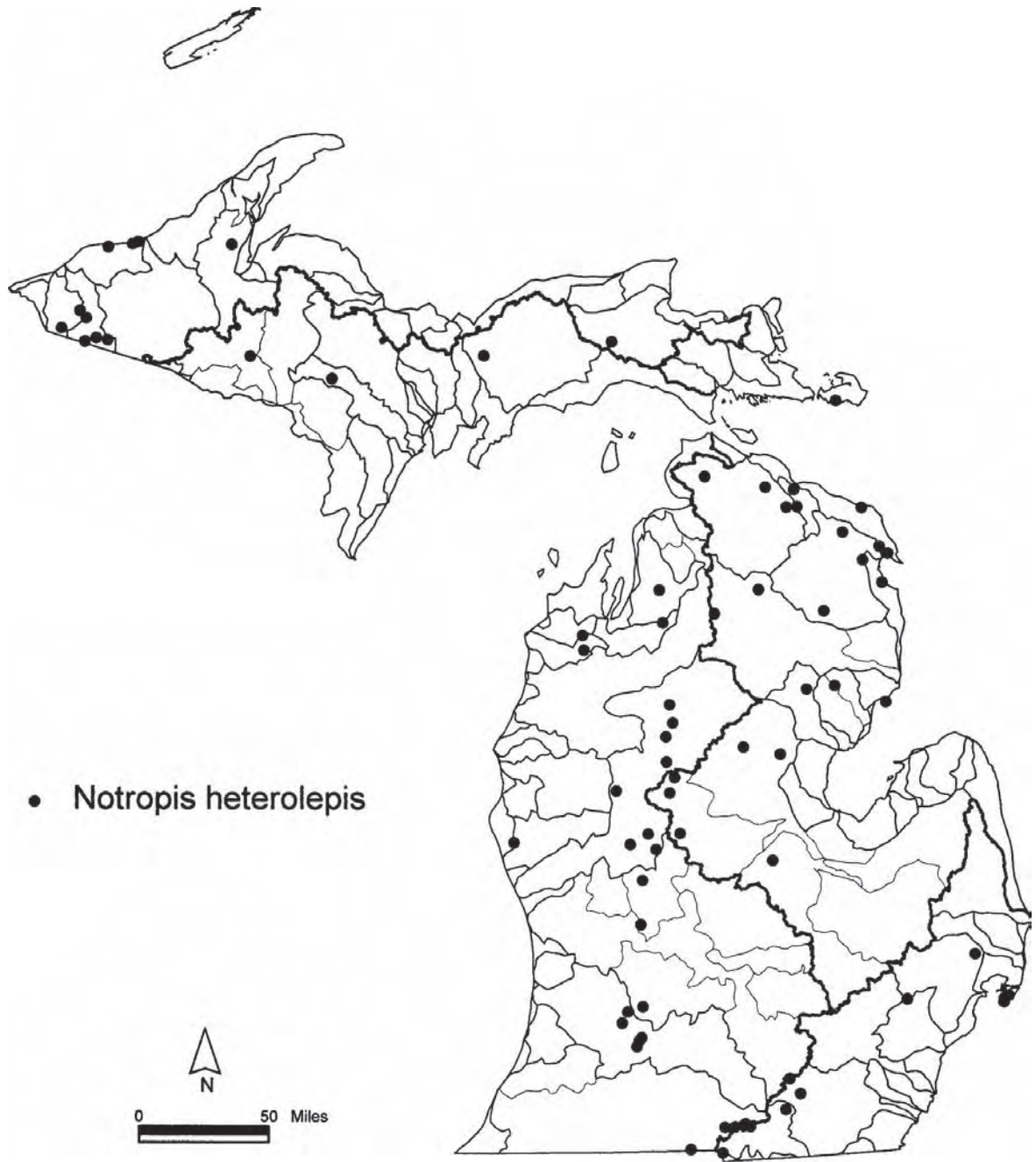




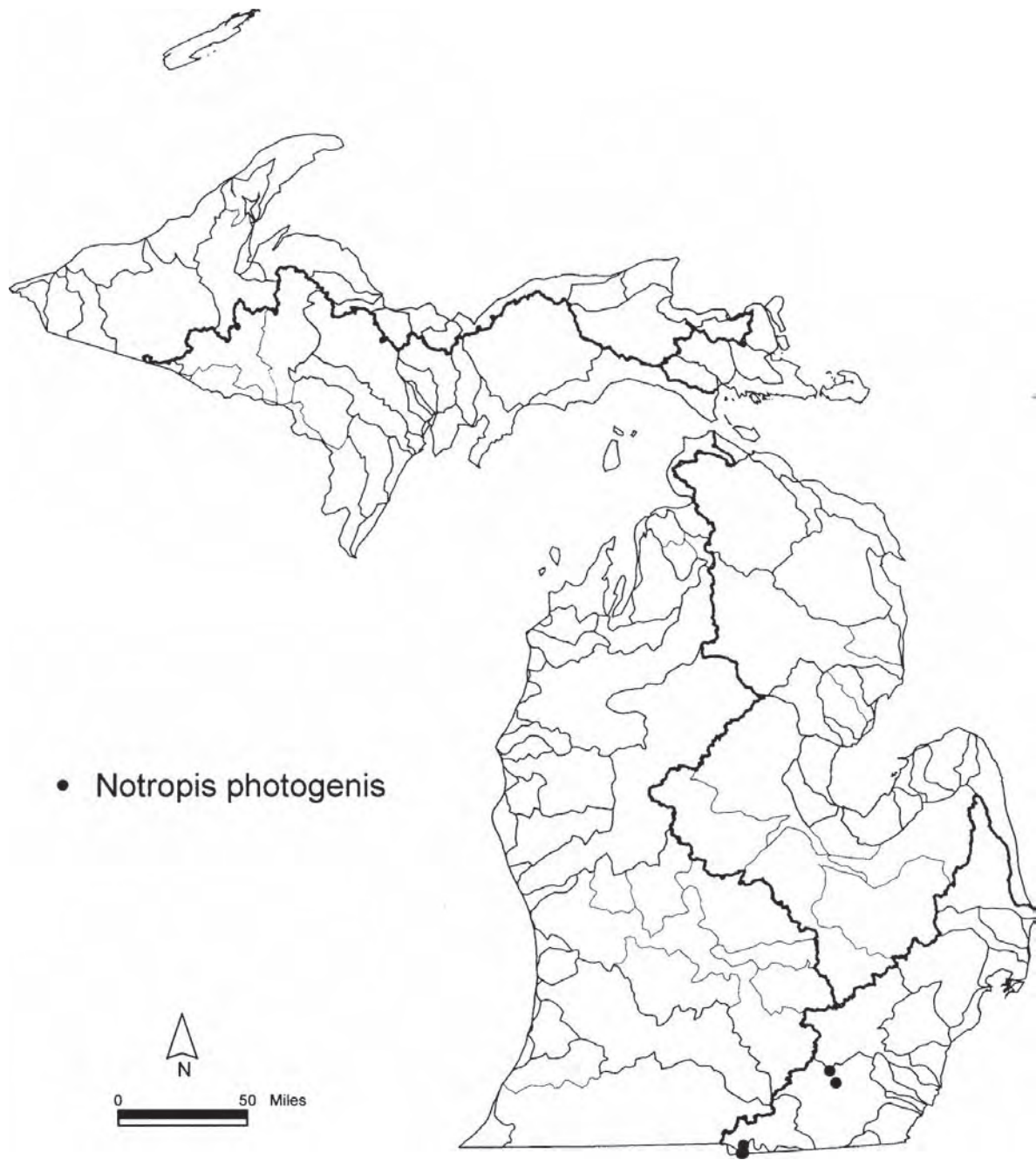


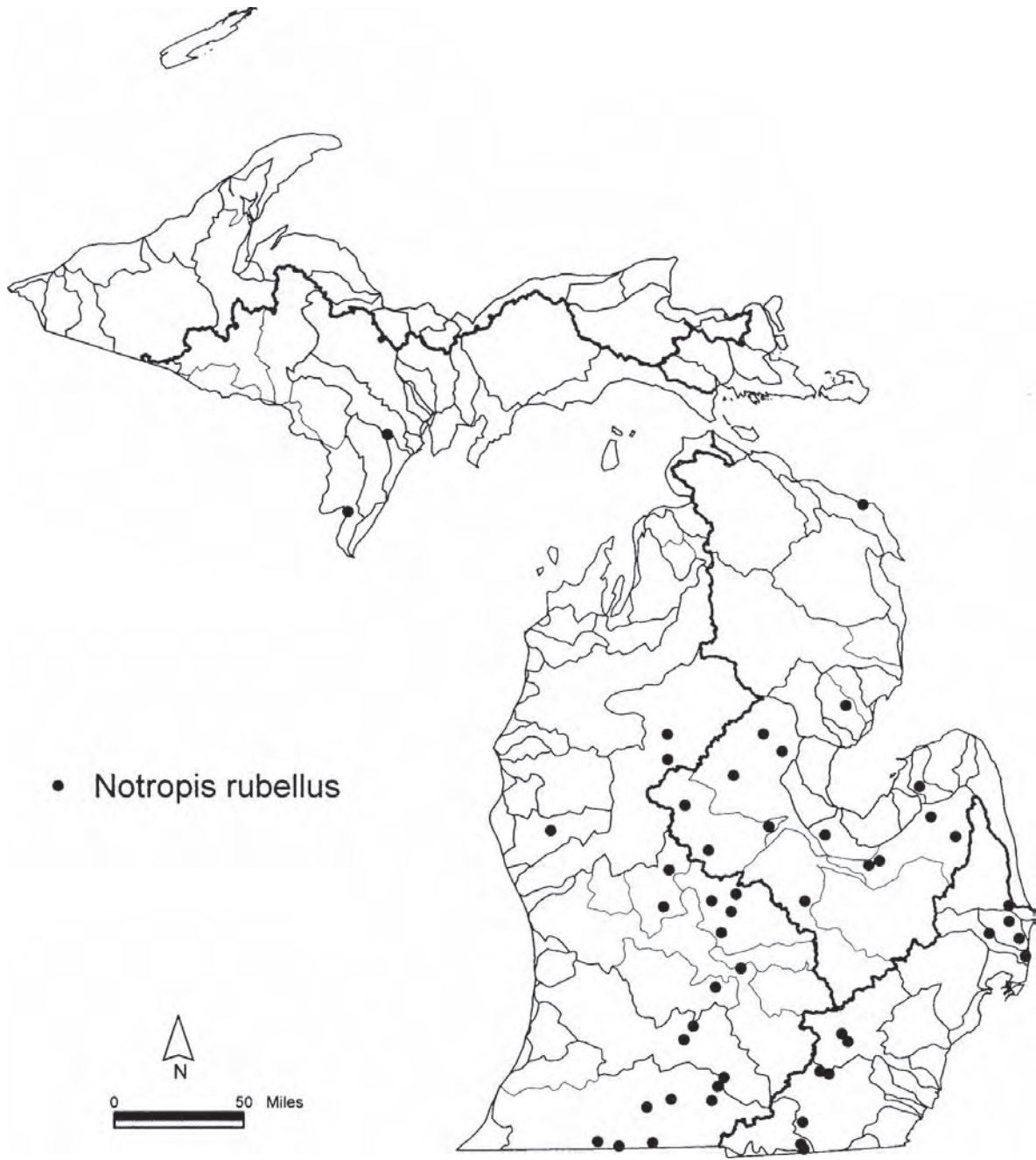


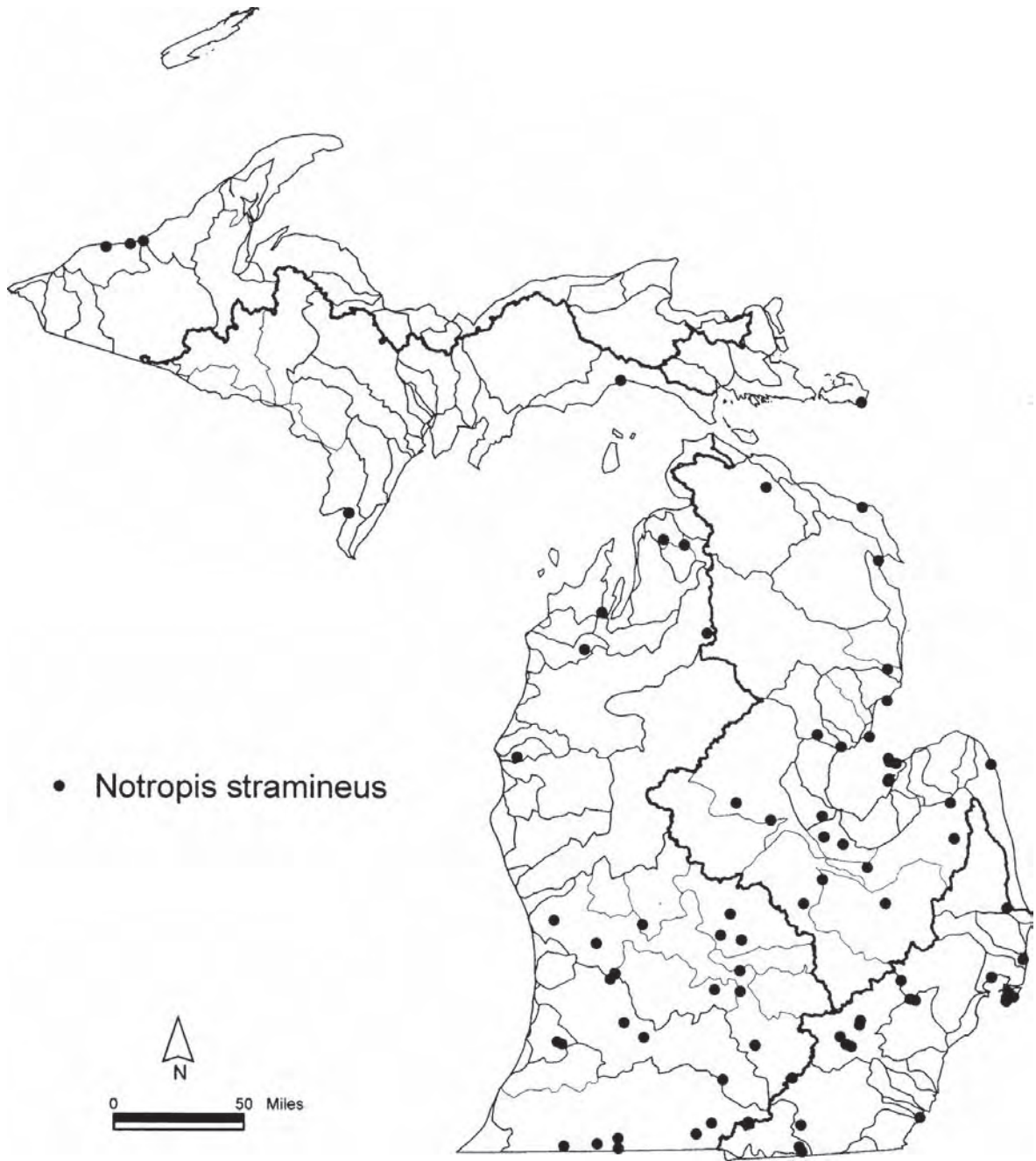


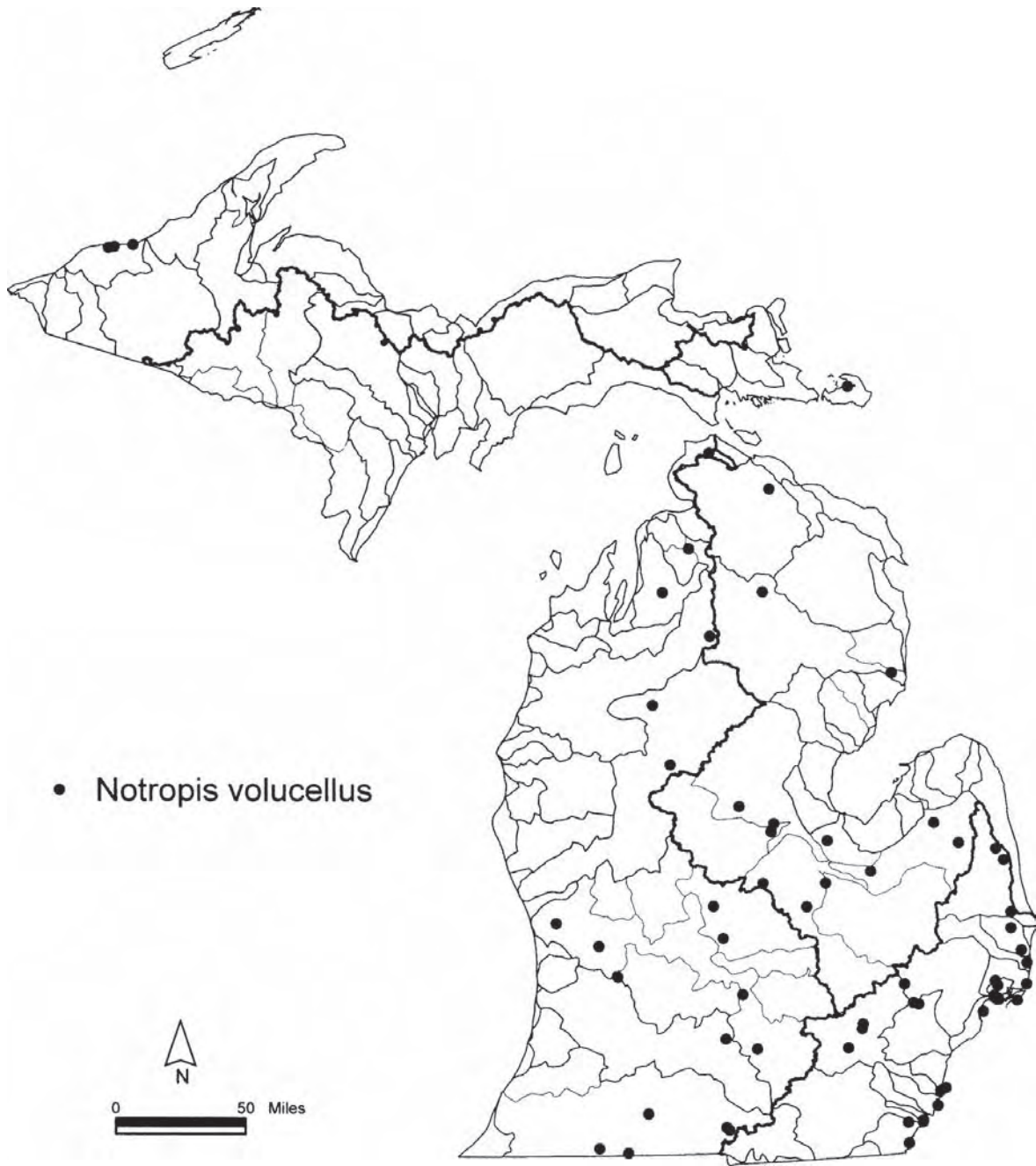


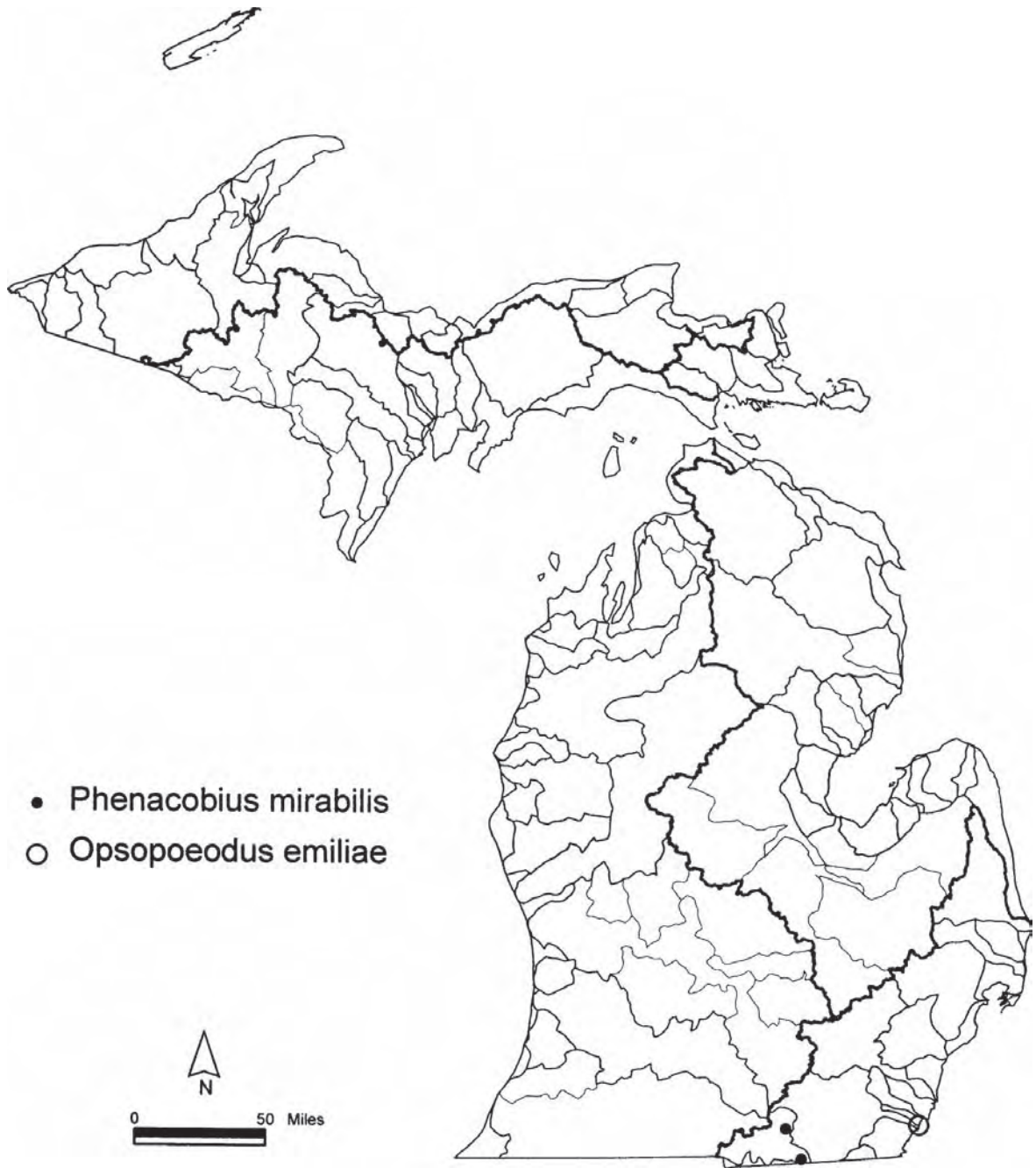


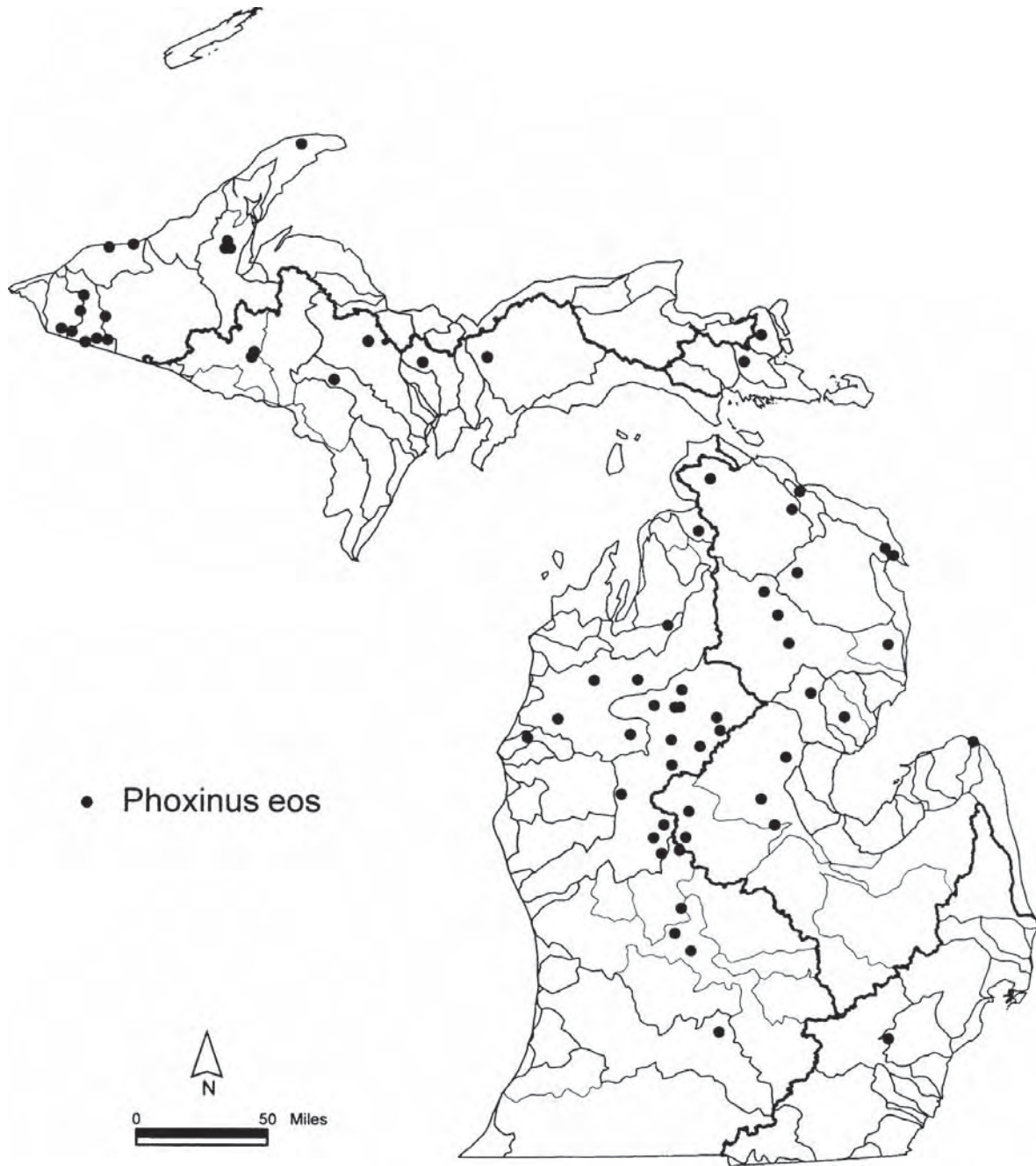




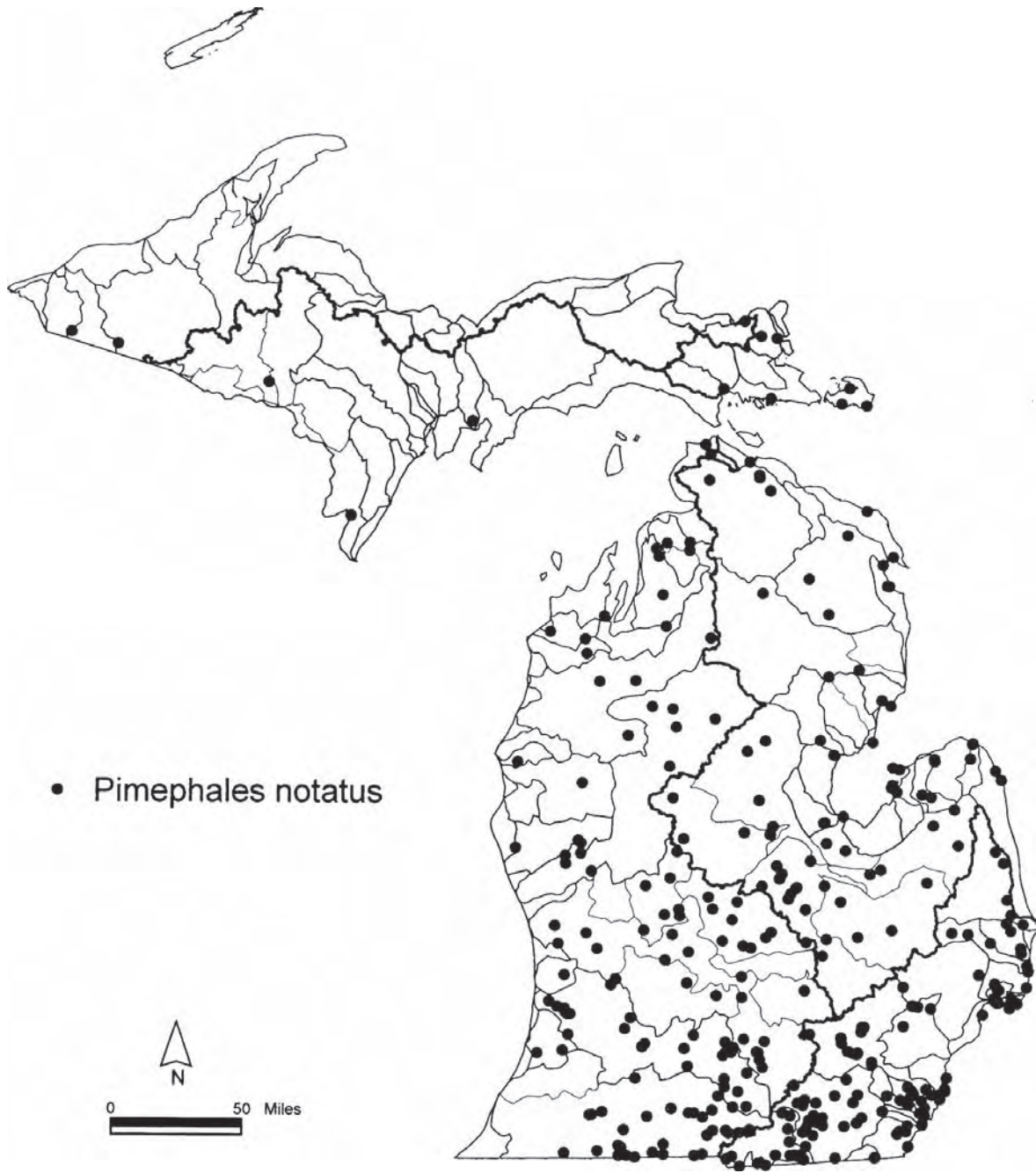


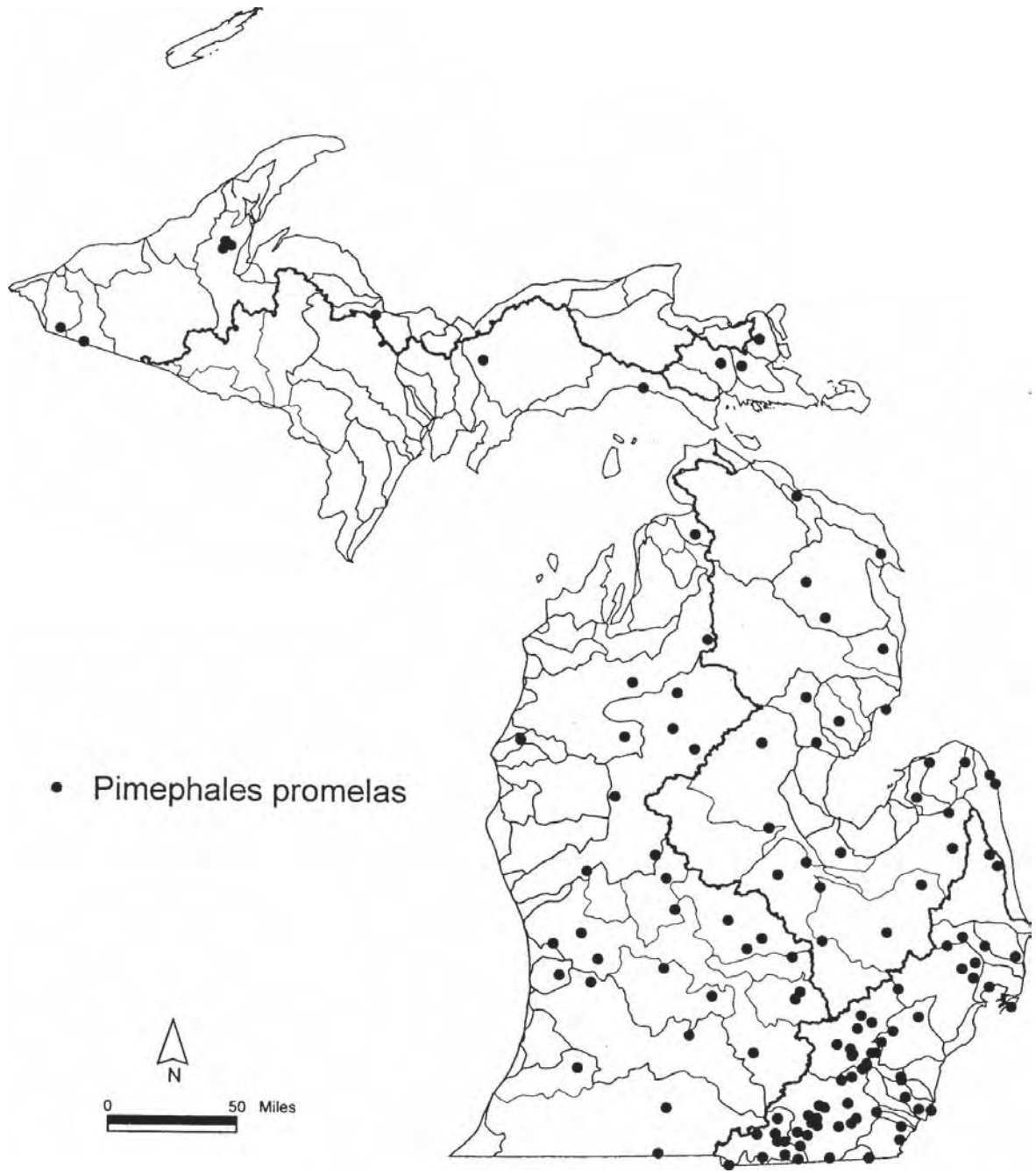


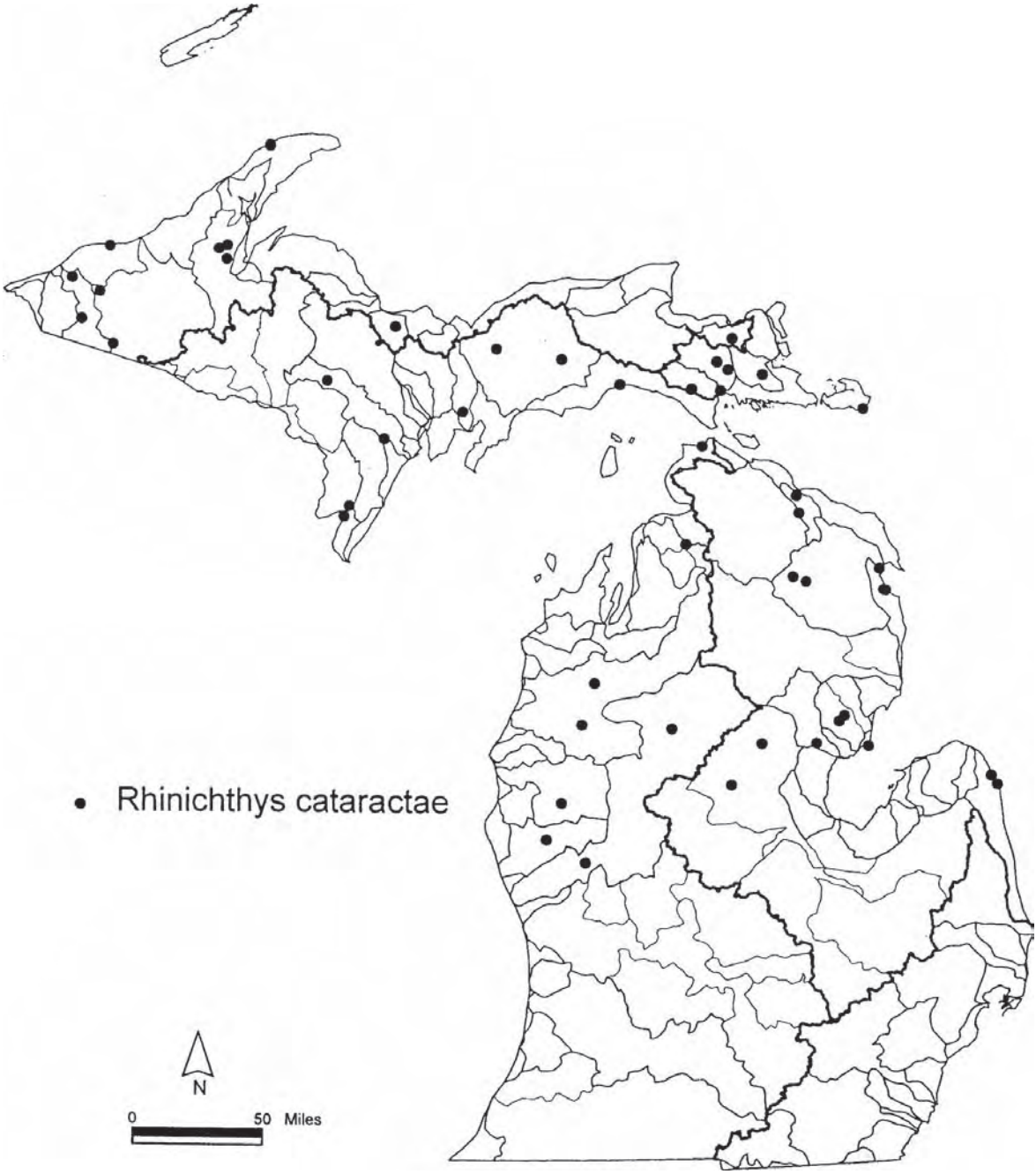




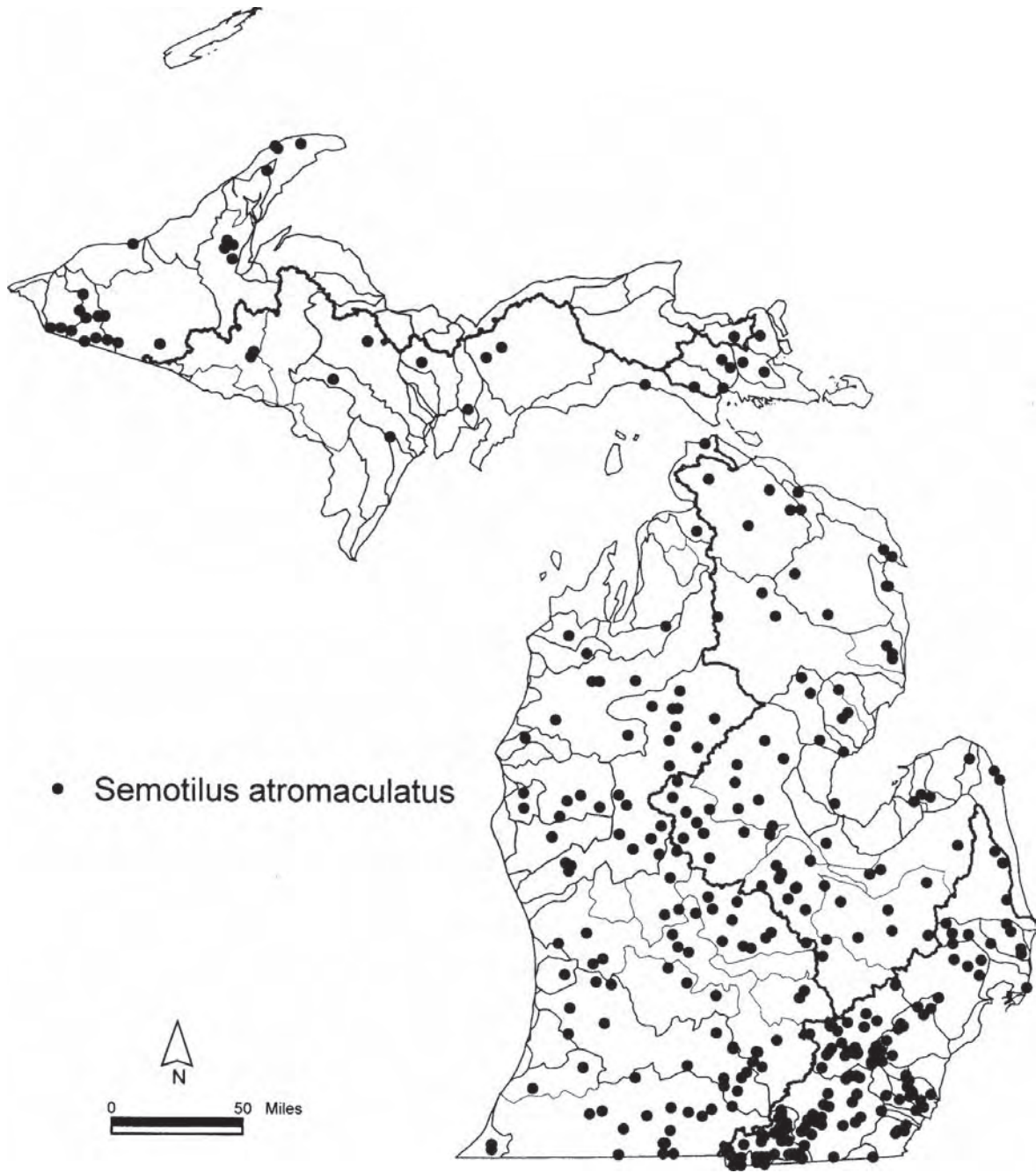


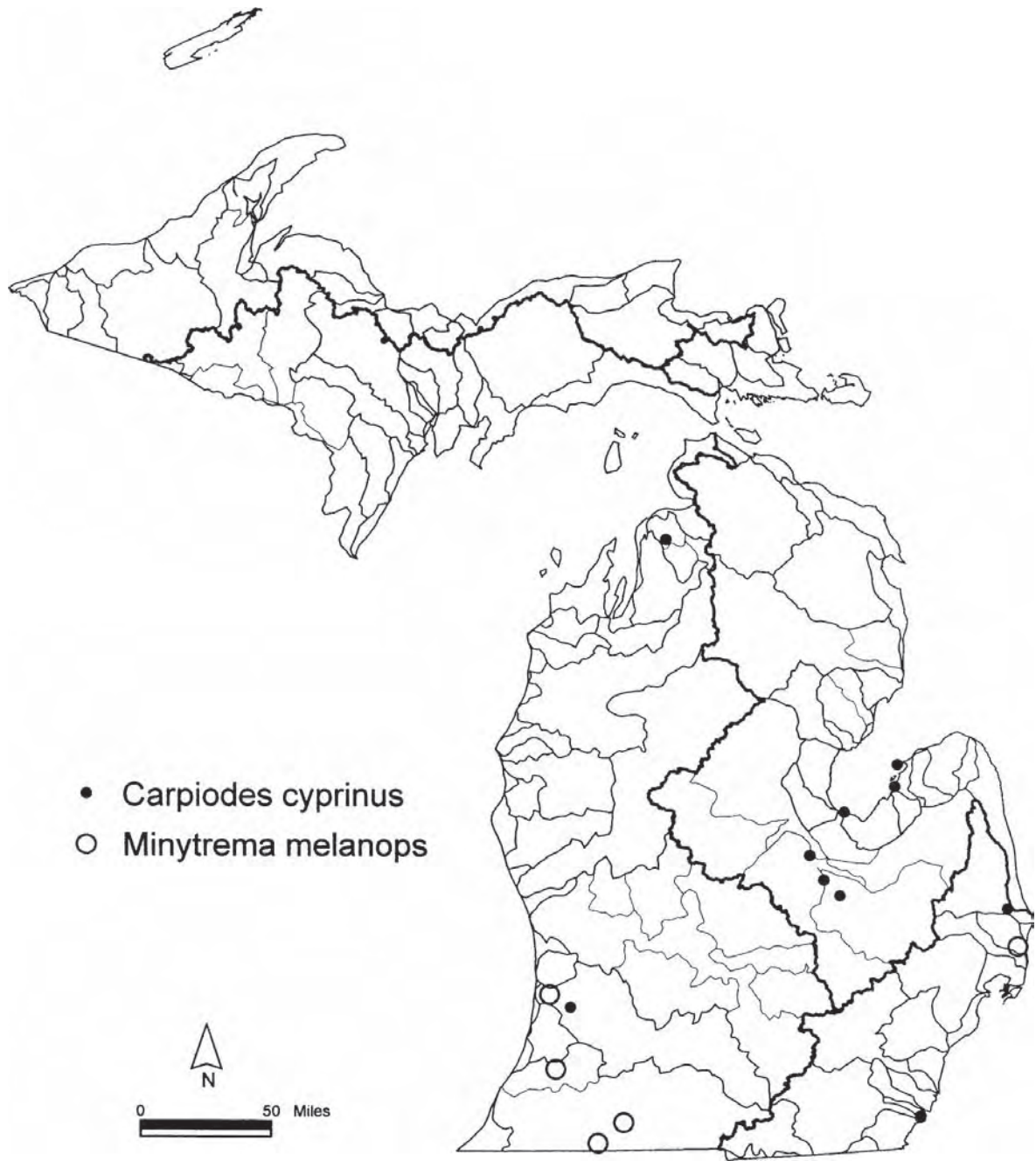


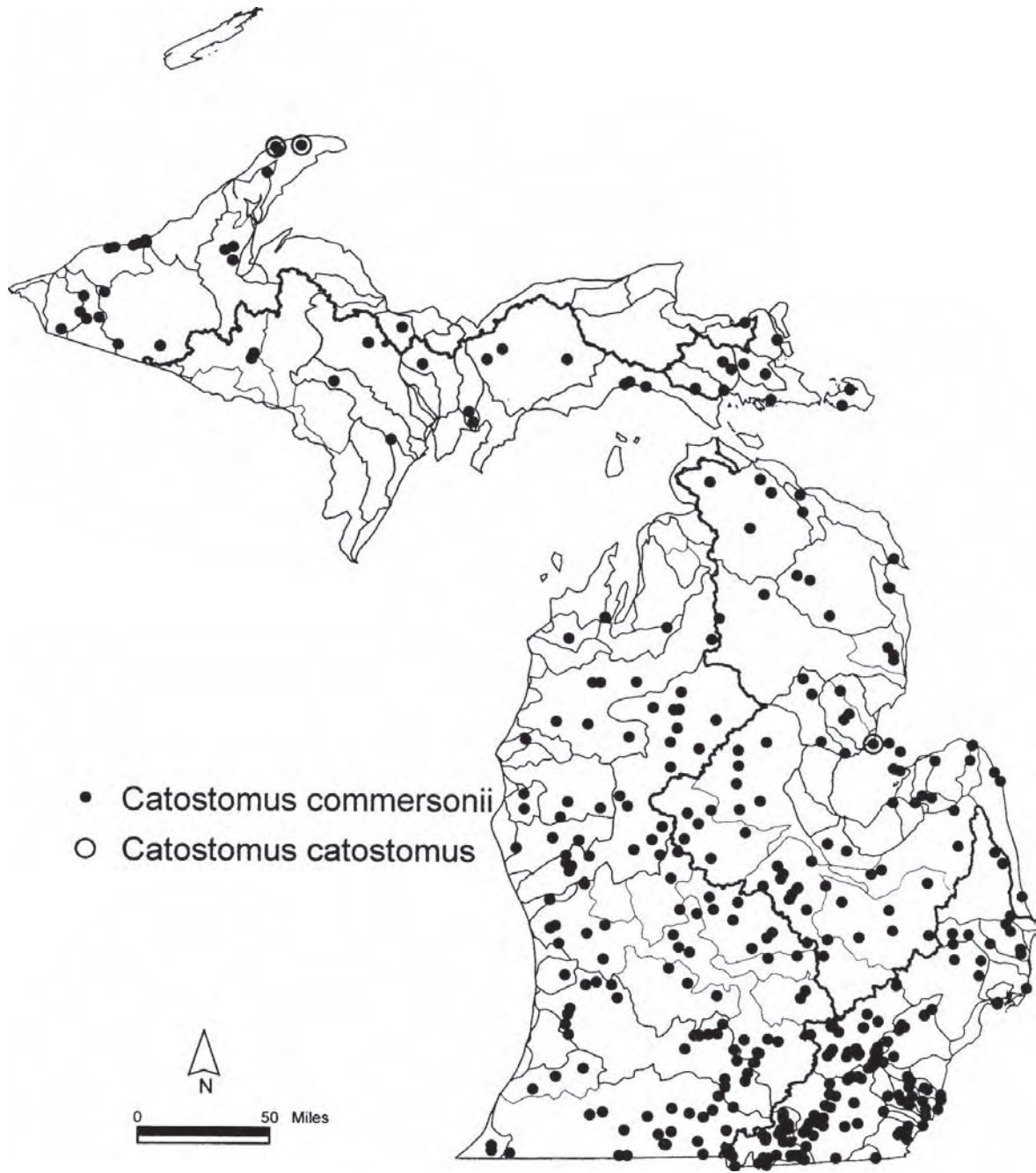


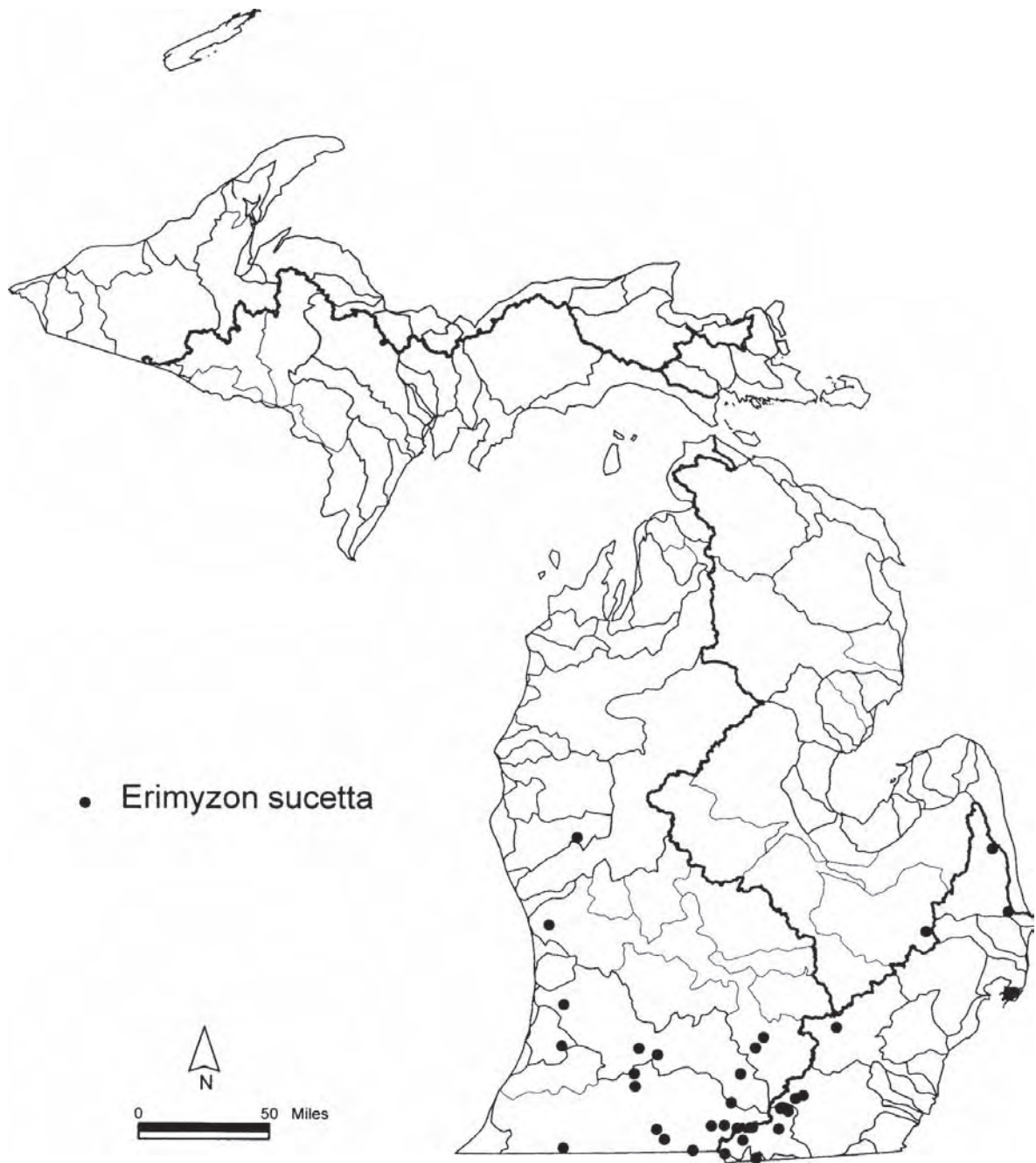


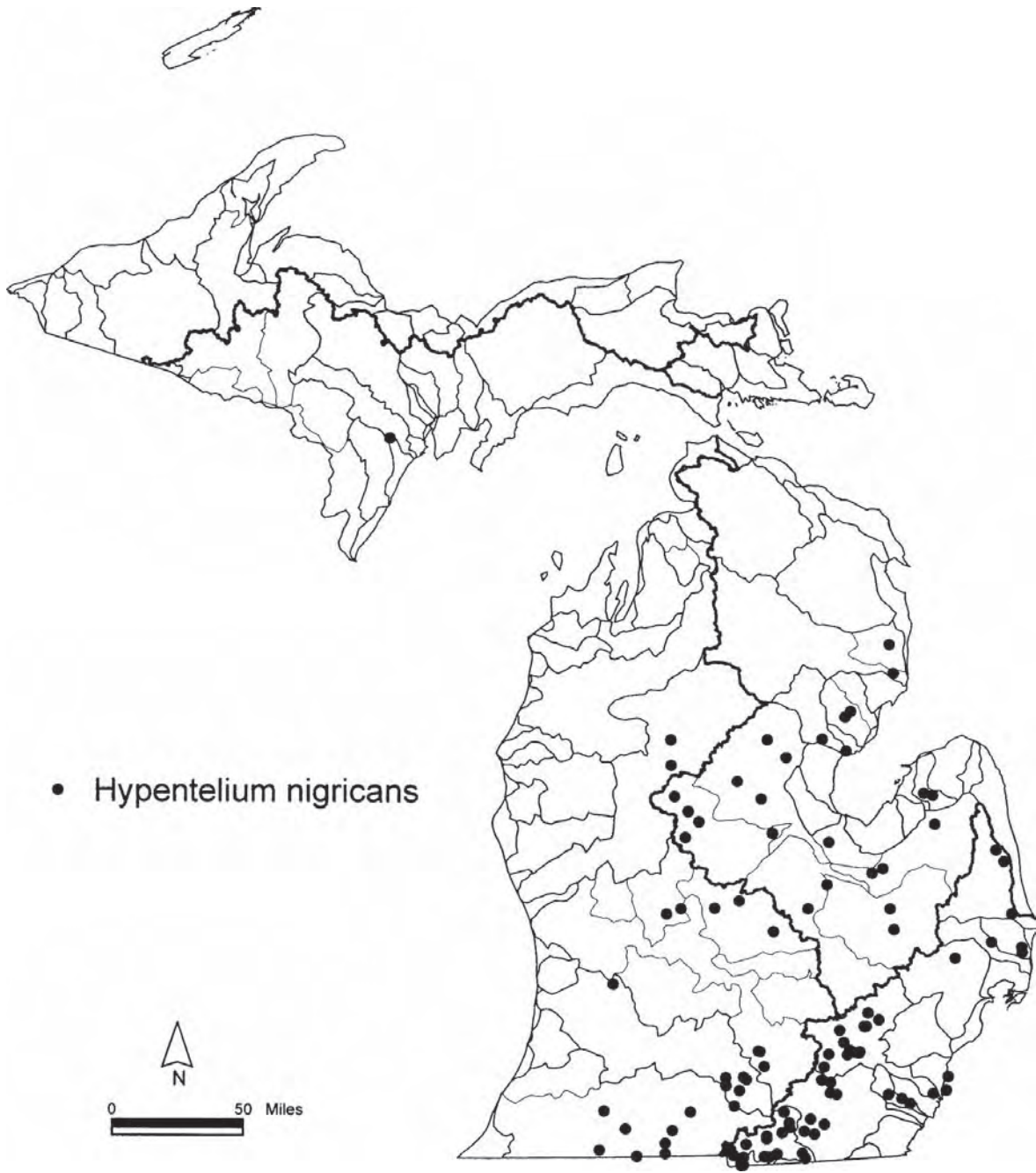




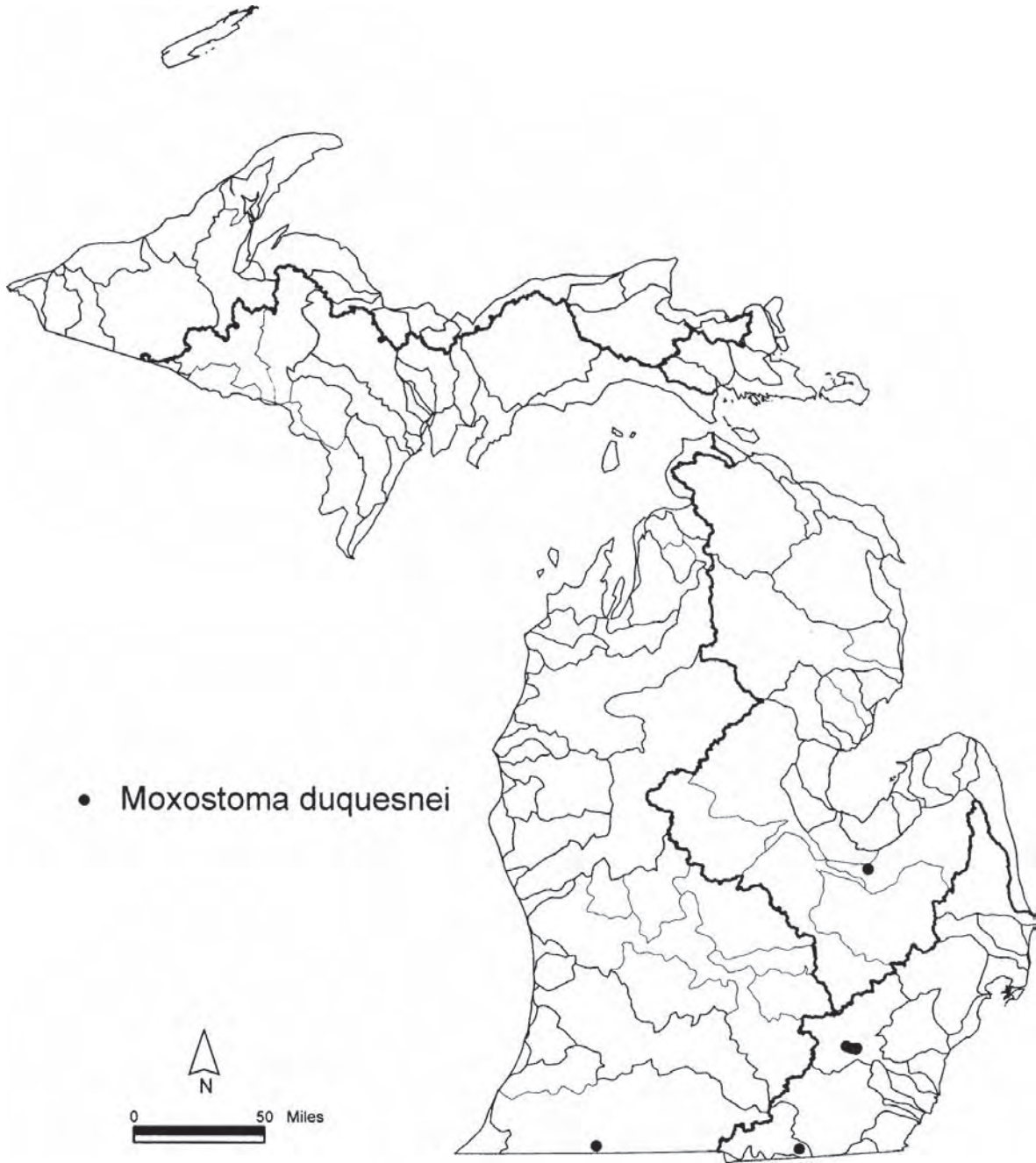


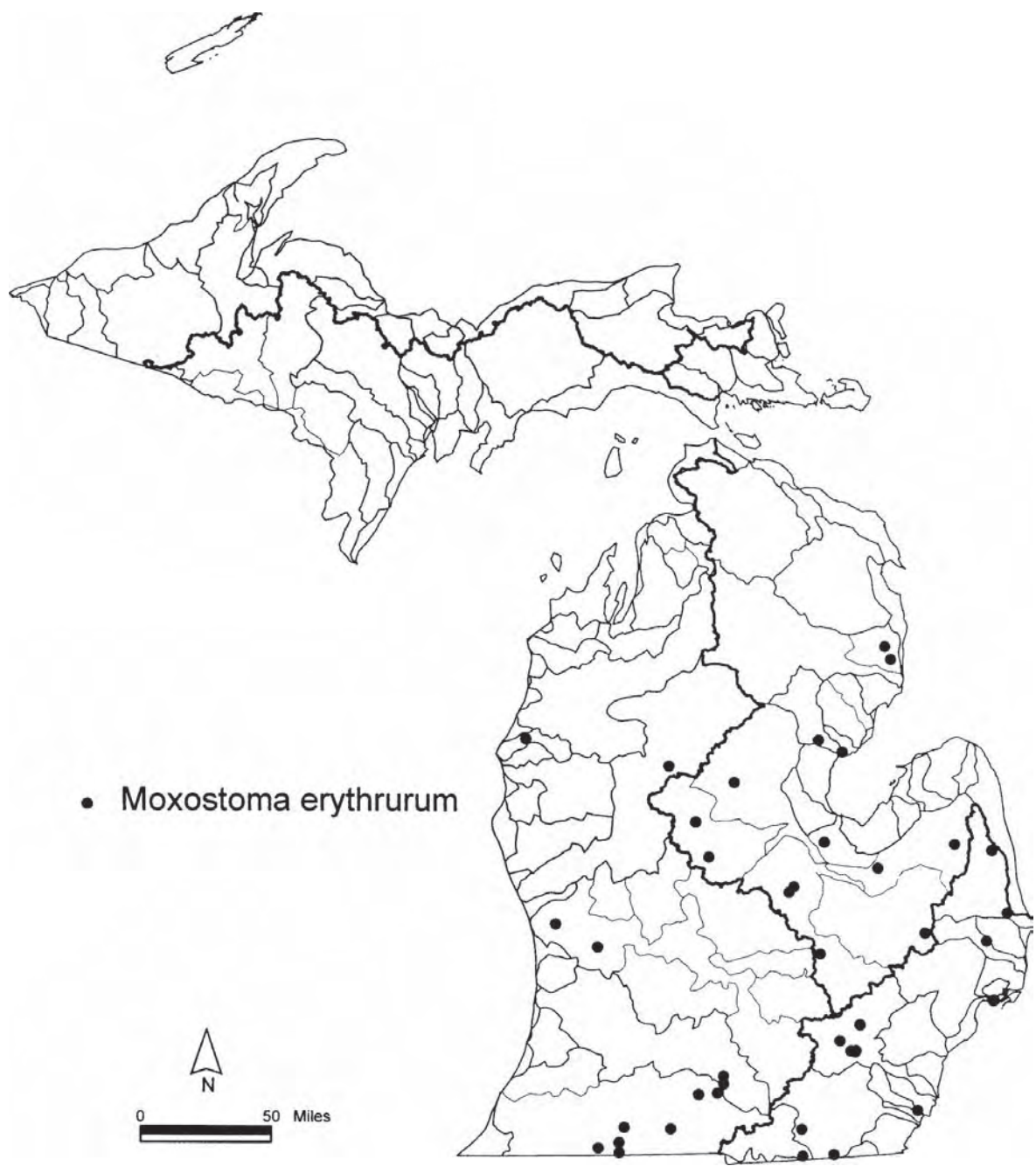




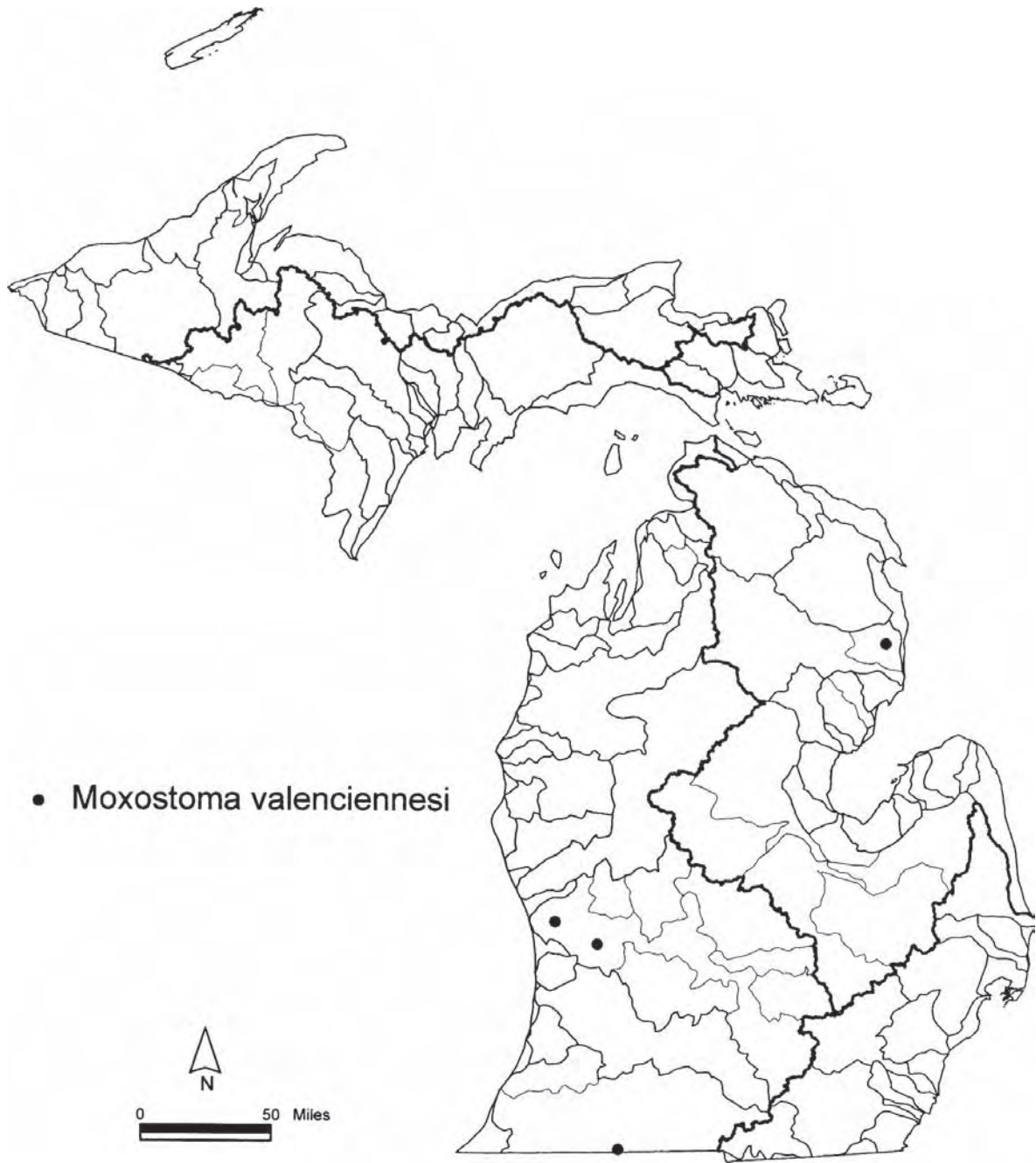




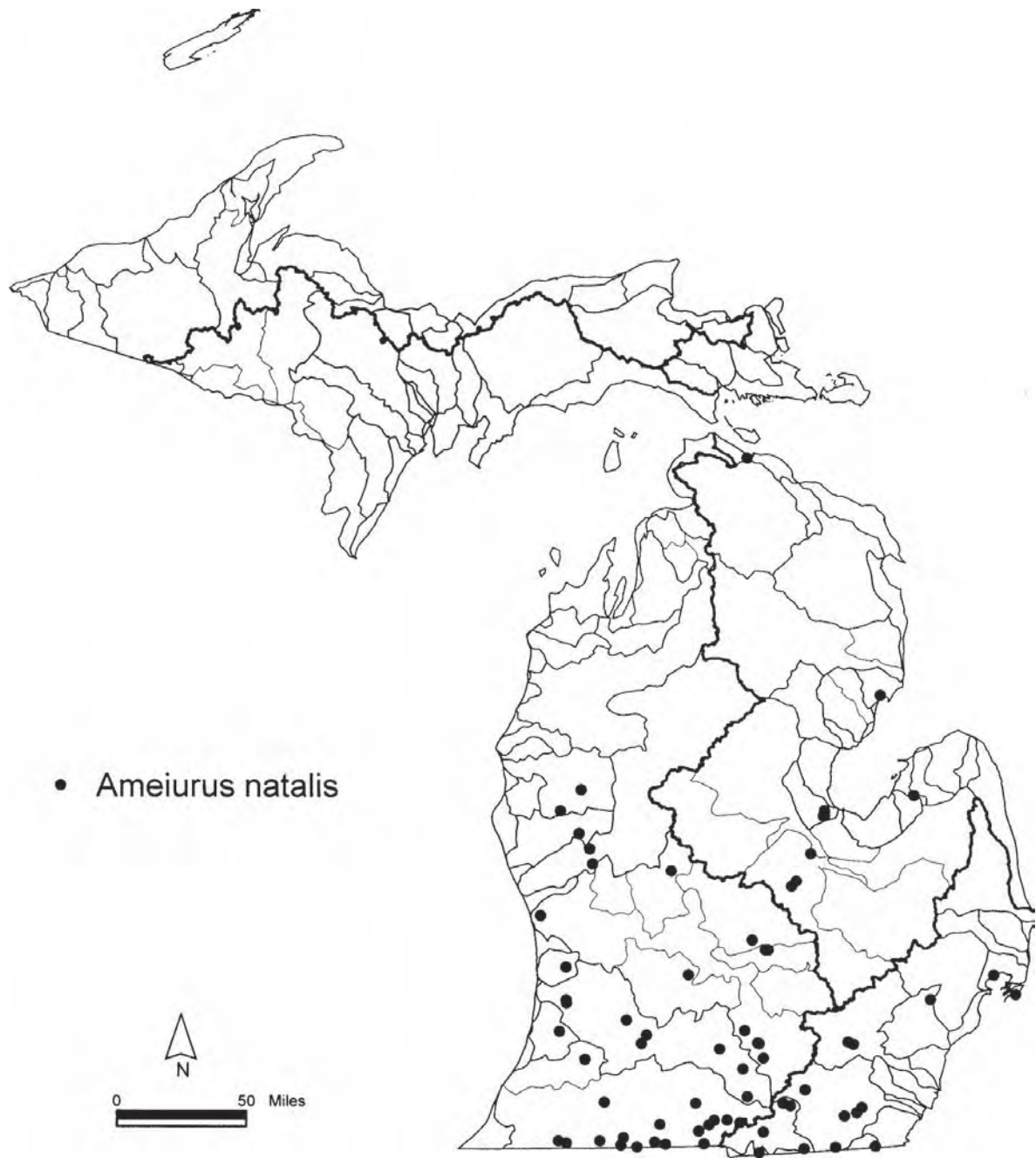


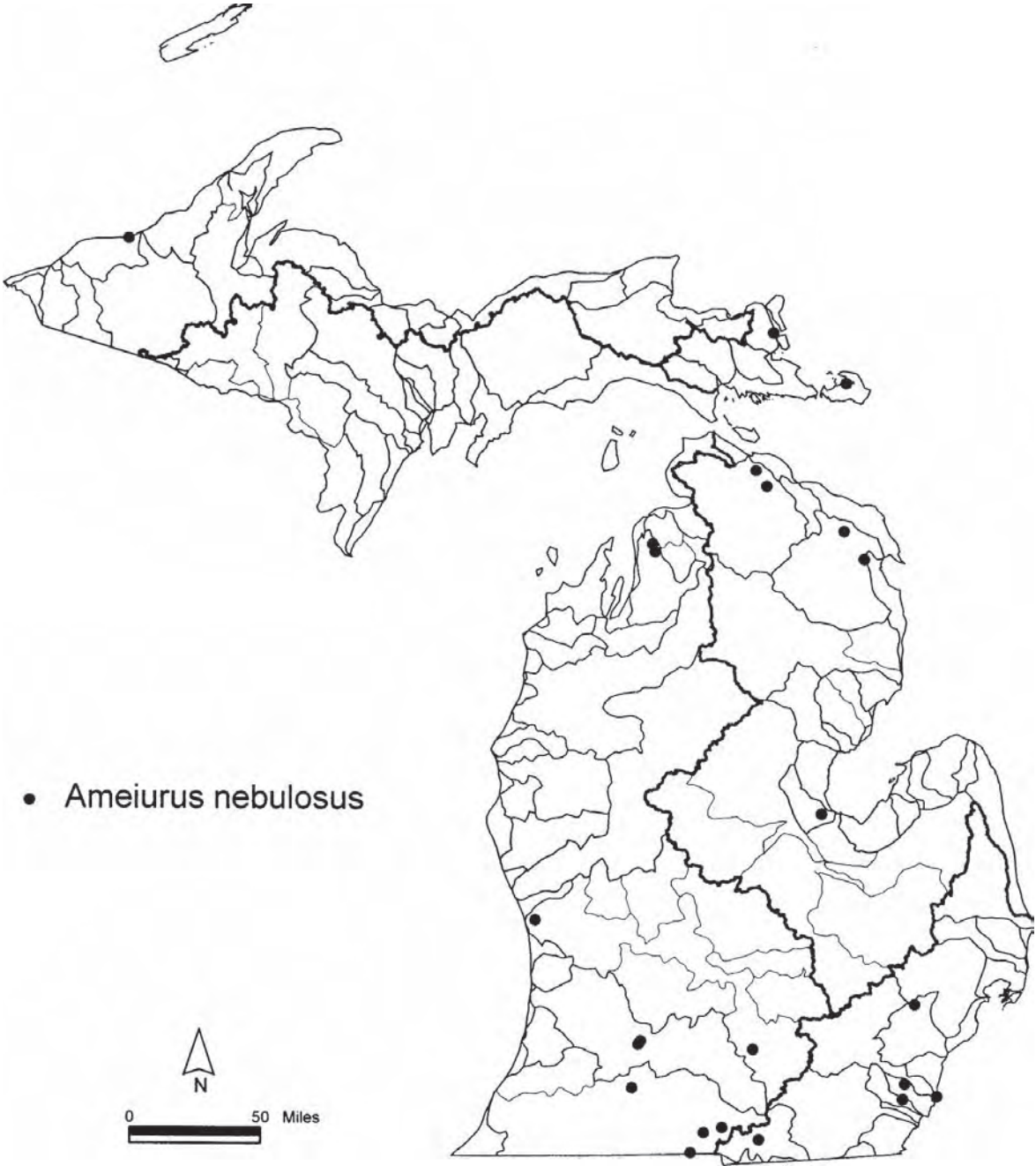


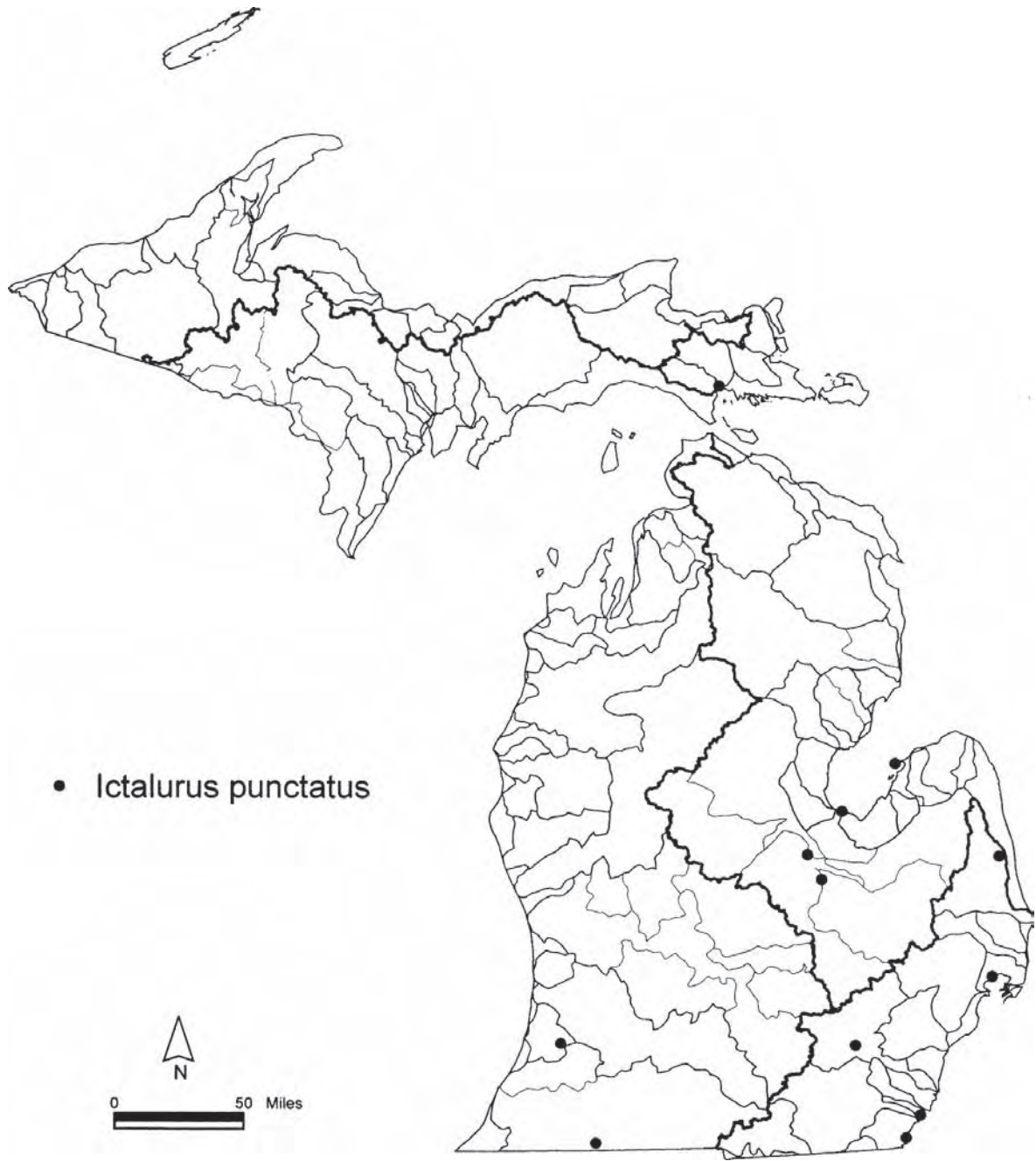




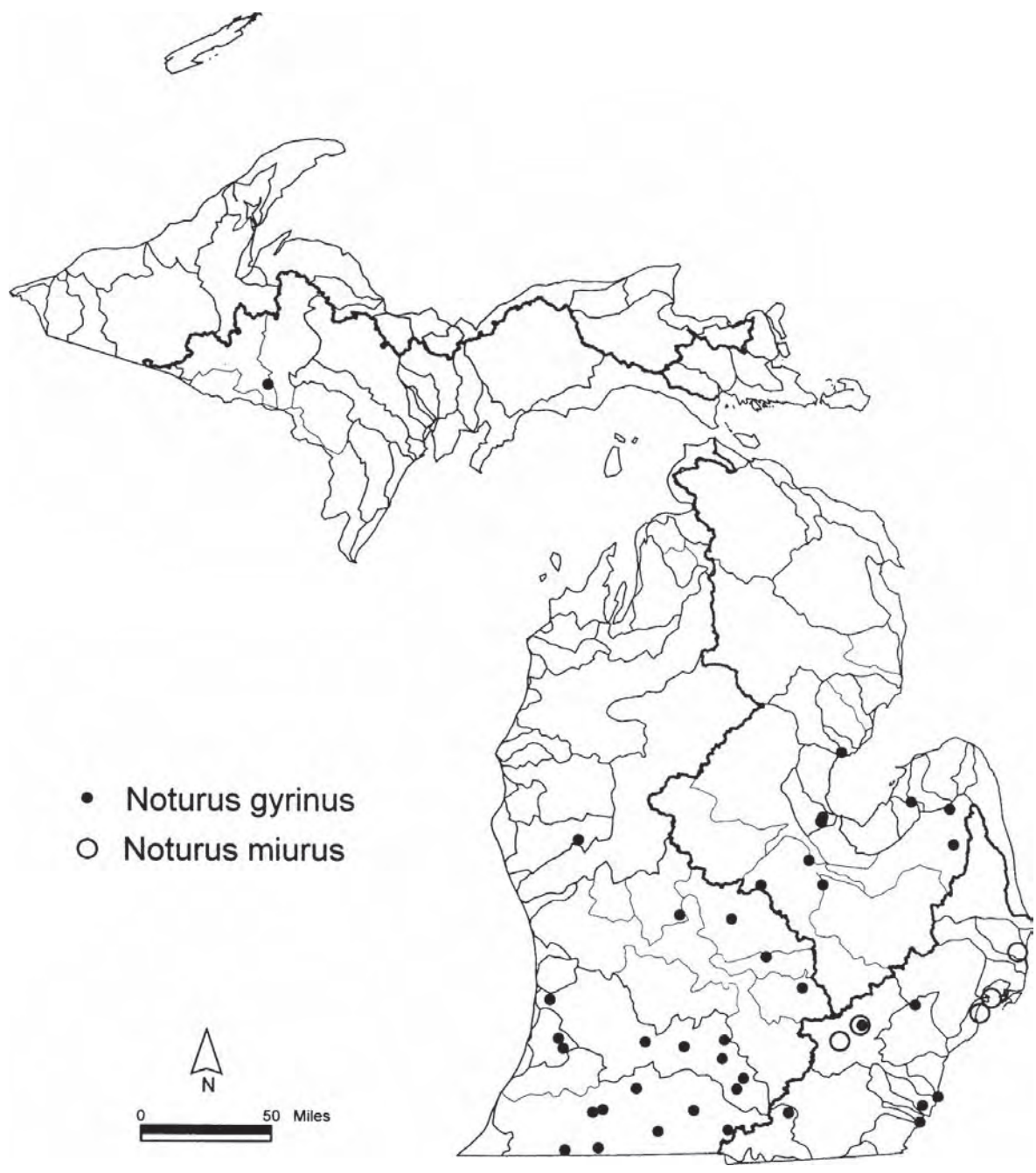


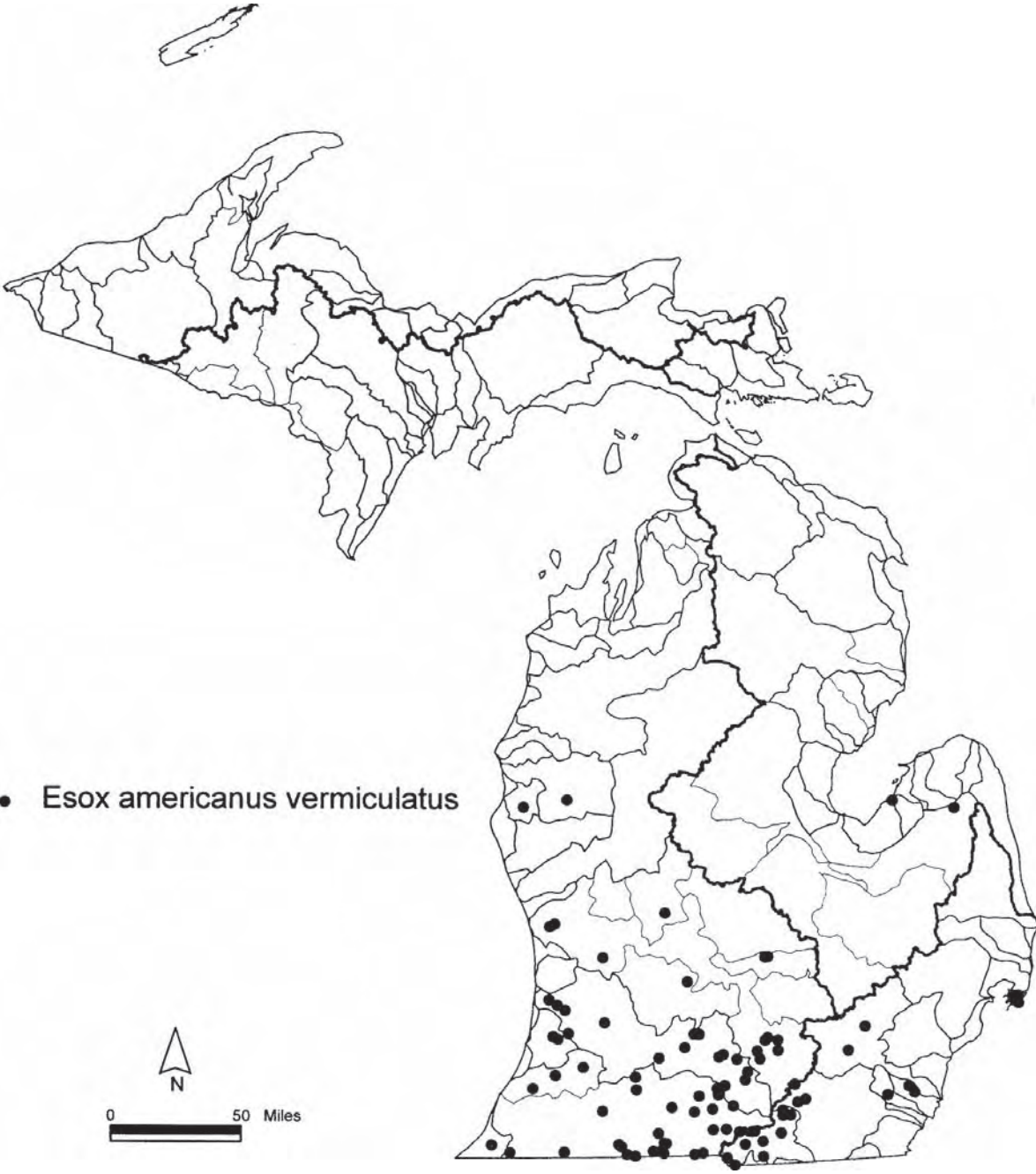


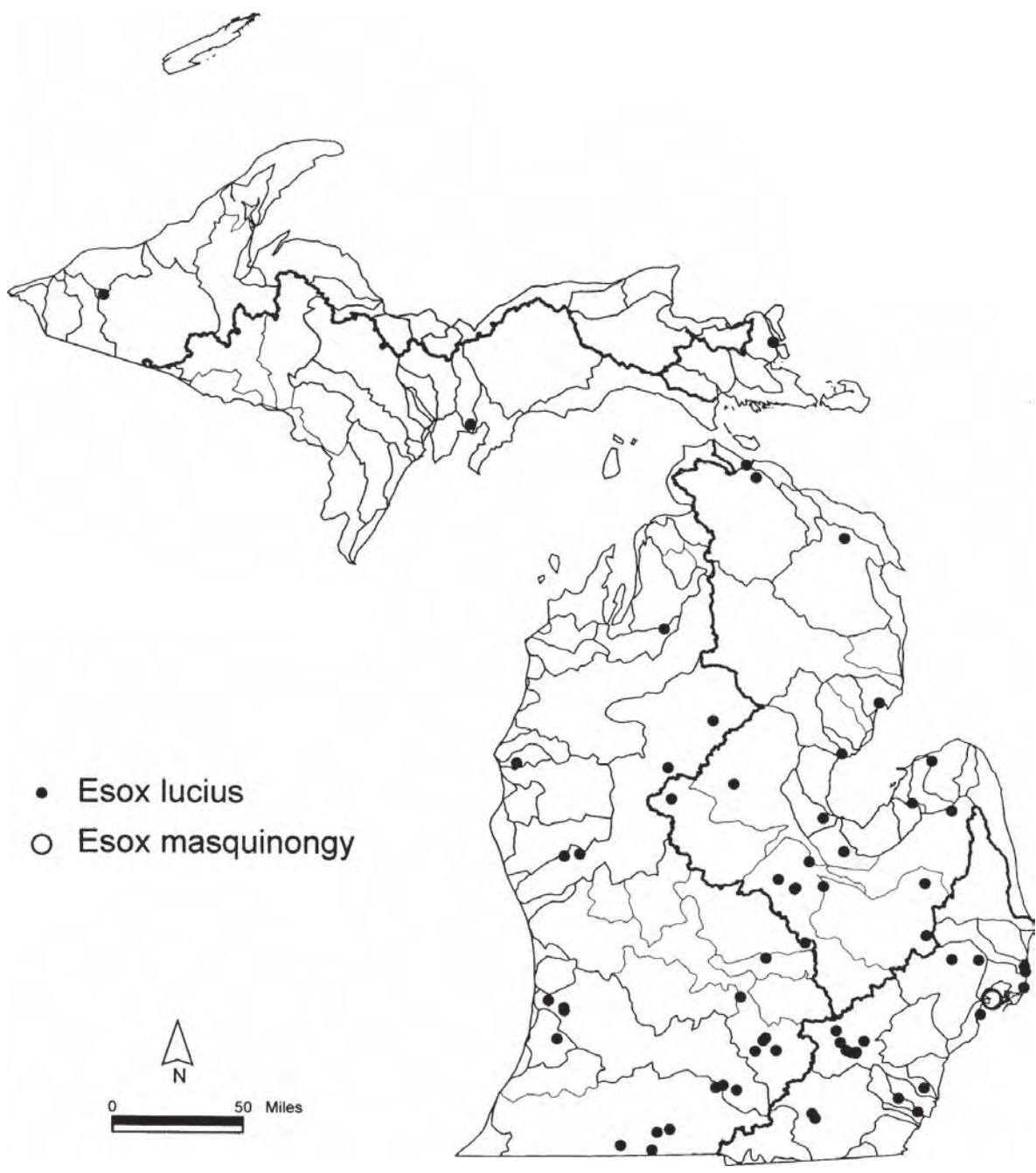


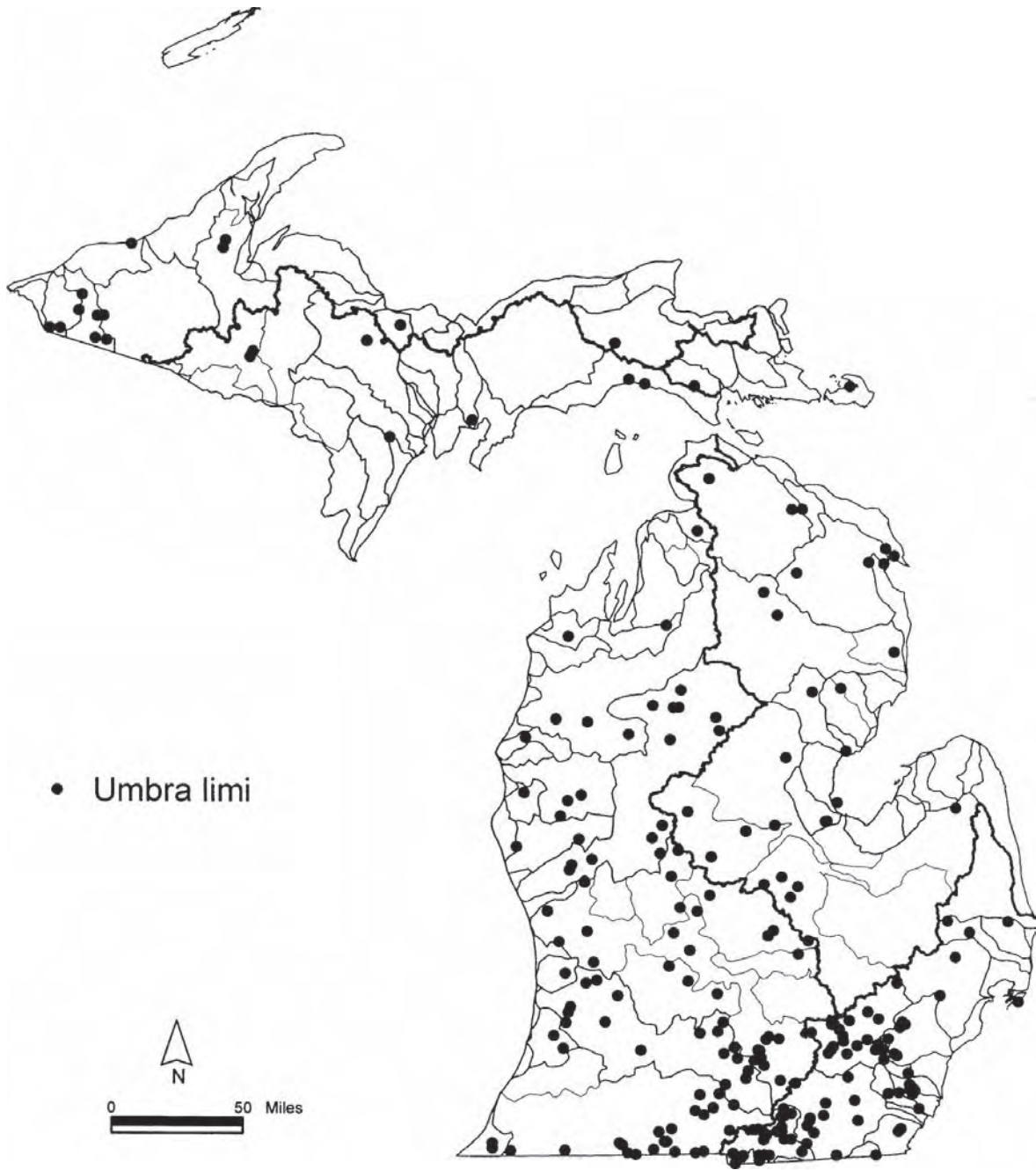














• *Osmerus mordax*

