

4. Batture

Rarity Rank: S4S5/G4G5

Synonyms: Riverfront Pioneer, Cottonwood-Willow, Black Willow, Cottonwood.

Ecological Systems:

CES203.190 Mississippi River Riparian Forest

CES203.512 Lower Mississippi River Bottomland and Floodplain Forest

CES203.489 East Gulf Coastal Plain Large River Floodplain Forest

CES203.065 Red River Large Floodplain Forest

CES203.488 West Gulf Coastal Plain Large River Floodplain Forest

General Description:

The batture community develops on the slope between the natural levee crest and major streams/rivers. It is a pioneer community which is first to appear on newly formed sand bars and river margins. The area receives sands and silts with each flood. The soils are semi-permanently inundated or saturated. Soil inundation or saturation by surface water or groundwater occurs periodically for a major portion of the growing season. Such conditions typically prevail during spring and summer months with a frequency ranging from 51 to 100 years per 100 years. The total duration of time for the seasonal event(s) normally exceeds 25 percent of the growing season.



Salix nigra (black willow) comprises a majority of the stocking, and *Populus deltoides* (cottonwood) is the primary associate. Secondary species may be, depending chiefly on successional stage, *Betula nigra* (riverbirch), *Fraxinus pennsylvanica* (green ash), *Platanus occidentalis* (American sycamore), *Carya illinoensis* (pecan), *Celtis laevigata* (hackberry), *Acer rubrum* (red maple), *Forestiera acuminata* (swamp privet), *Planera aquatica* (water elm), *Ulmus americana* (American elm), *Taxodium distichum* (baldcypress), *Acer negundo* (box elder) and *Morus rubra* (red mulberry). *Salix exigua* (sandbar willow) may be common in certain sites. Batture is a community undergoing relatively rapid succession. Black willow is a temporary, short-lived pioneer species of very rapid growth. Cottonwood will outgrow willow and become dominant except where frequent and extended growing-season flooding covers the trees and limits its growth. As sediments build up in the community and succession progresses, willow and cottonwood become less dominant and secondary associates gain increasing importance in the community. The community often succeeds into Hackberry-American Elm-Green Ash or Sycamore-Sweetgum-American Elm Bottomland Forest.

The successional sequence is a function of river meander movement rates and point bar formation. Rivers with swift meander movements over unconsolidated sands produce tapered slopes on point bars which are first colonized by the Batture community.

Current Extent and Status:

Batture occurs primarily along the Mississippi River but also along the Atchafalaya, Red, and perhaps other smaller rivers. It is apparently a secure and viable habitat in Louisiana. The acreage and number of intact sites is unknown.



BATTURE SPECIES OF CONSERVATION CONCERN (20)		
BIRDS		REPTILES
Yellow-crowned Night-Heron	Northern Parula	Ringed Map Turtle
Wood Stork	Prothonotary Warbler	Ouachita Map Turtle
Swallow-tailed Kite	Swainson's Warbler	Sabine Map Turtle
Bald Eagle	Kentucky Warbler	Pascagoula Map Turtle
American Woodcock	Hooded Warbler	Timber Rattlesnake
Yellow-billed Cuckoo	Orchard Oriole	
Wood Thrush		
Yellow-throated Vireo	MAMMALS	
	Long-tailed Weasel	

Priority Species Research and Survey Needs:

Swallow-tailed Kite: Continue with nesting surveys and monitoring of kites on public and private lands to fill data gaps in distribution and abundance for inclusion in LNHP database and Audubon nationwide database.

Songbirds: Continue to support research on silviculture/land management practices and their effects on all songbird species.

Long-tailed Weasel: Considered vulnerable in Louisiana. Intensive surveys needed to update occurrence records and abundance for inclusion in LNHP database. Document the habitat relationships of the long-tailed weasel and how dependent this species is upon batture habitats, relative to other habitat types.

Species Conservation Strategies:

1. Identify Important Bird Areas (IBAs) or potential IBAs and partner with Baton Rouge Audubon Society (BRAS), OAS, and the NAS to implement conservation recommendations from SWG project T27 upon completion.
2. Swallow-tailed Kite: Implement conservation and management recommendations of SWG project T9 (Coulson 2004).
3. Bald Eagle: Continue with long-term monitoring of active bald eagle nests, successful breeding pairs, and fledged eagles.
4. Work with landowners to initiate or continue the implementation of PIF bird conservation plans, conservation plans developed for amphibians and reptiles, and USFWS endangered and threatened species recovery plans over the next 10 years.

Threats Affecting Habitat:

The following table illustrates the threats identified for this habitat type and the sources of these threats. This represents all threats and sources of threats identified across all ecoregions of the state where this habitat occurs.

Source of Threat	Threat					
	Altered Composition/ Structure	Habitat Destruction or Conversion	Habitat Fragmentation	Herbivory	Modification of Water Levels; Changes in Natural Flow Patterns	Toxins/ Contaminants
Borrow pits		XXX	XXX			
Commercial/industrial development		XXX	XXX			
Construction of ditches, drainage or diversion systems		XXX	XXX			
Industrial discharge						XXX
Invasive/alien species	XXX					
Management of/for certain species	XXX			XXX		
Mining practices		XXX	XXX			
Operation of drainage or diversion systems	XXX				XXX	XXX

Habitat Conservation Strategies:

1. Work with city planning commissions and local conservation groups to promote development of batture reserves to retain natural habitats.

2. Work with LDEQ, the Environmental Protection Agency (EPA), and other federal and state agencies to fill data gaps concerning ecological system processes and water quality/discharge impacts on this habitat.
3. Work with COE and local levee boards to maintain the natural ecology of batture areas and to educate these organizations on the productivity of this habitat in meeting the needs of resident and migratory wildlife species.

References:

COULSON, J. O. 2004. Identifying swallow-tailed kite activity centers: determining use of the state of Louisiana managed lands. Final report. Report to Louisiana Department of Wildlife and Fisheries, Baton Rouge, LA.

LNHP. 1986-2004. The natural communities of Louisiana. Louisiana Natural Heritage Program, Louisiana Department of Wildlife and Fisheries, Baton Rouge, LA.