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CLASSIFICATION, R-9, Hoosier
Natural Areas
Reg. U-4

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Natural Area
Indiana Pioneer Mothers' Memorial
Natural Area

August 14, 1943

THE INDIANA PIONEER MOTHERS' MEMORIAL NATURAL AREA

Hoosier National Forest Purchase Units

Located within the 258-acre Indiana Pioneer Mothers' Memorial Forest near Paoli, Indiana, on the Hoosier National Forest Purchase Unit, is an 88-acre virgin grove which is a superb specimen of the magnificent forest that once covered the region, a museum piece from which the highest scientific and inspirational values can be derived. Unique are the towering walnuts, 250 of them, many over 60 feet to the first limb and approximately three feet in diameter. There are few, if any, walnuts like them anywhere. They are mostly in two groves, cathedral-like in their majesty. Huge yellow poplar, white oak, white ash, beech, and maple comprise the 88-acre grove, with all the conditions of the virgin forest virtually undisturbed. This tract is one of the few remaining examples of the virgin forests in Southern Indiana, and probably one of the few remaining specimens in the Central States. Its unique and highest value to the public lies in the fact that it represents an advanced stage in ecological development reached only through centuries of undisturbed growth and natural change. The scientific and educational value of this tract, particularly in the fields of forestry, botany, ecology and soils is inestimable. Its plant associations and growth conditions cannot be duplicated. It is irreplaceable and invaluable as a study area from the scientific point of view.

Public acquisition of the 88-acre virgin grove to be administered by the U. S. Forest Service as a part of the Hoosier Natichal Forest Purchase Units was made possible largely through the efforts of The Meridian Club of Paoli, Indiana, The Indiana Pioneer Mothers' Club and many other public spirited agencies and citizens who donated, altogether, fifty per cent of the purchase price of the 258 acres to be known as the Indiana Pioneer Mothers' Memorial Forest and to be preserved and administered for historic, scientific, educational and inspirational purposes for the public. Within the 88-acre virgin grove may be seen the following natural flora:

Pioneer Mothers

Giant Trees

White Oak	42-55	inches	diameter
White Ash	37-46	"	"
Black Walnut	32-35	"	"
Beech	27-37	"	"
Yellow Poplar	28-44	"	"

Other Species

Black Oak	Bitternut Hickory
Chinquapin Oak	Pignut Hickory
Red Oak	Shagbark Hickory
Hard Maple	Kentucky Coffee Tree
Sassafras	Mulberry
Black Locust	Cherry
Honey Locust	Red Elm
Red Cedar	Hackberry
Sycamore	Butternut
Black Gum	Green Ash

Shrub-Like Trees, Shrubs and Vines

Dogwood	Blue Beech
Redbud	Devil's Club
Paw-Paw	Ironwood
Spicewood	Hydrangea
Wahoe	Stone Root
Bittersweet	Solomon's Seal
Grape	Virginia Creeper
Green Briar	

Flowering Plants

Bedstraw	Wild Ginger
Hooked Ranunculas	Blue Bell
Jack-in-the-Pulpit	Trilium
May Apple	Meadow Rue
Common Violet	Broad Beech Fern
Dogtooth Violet	Maiden Hair Fern
Spring Beauty	Christmas Fern
Sweet William	Orchid
White Bur	Jewel Weed
Avens	

Principal Timber Species by diameters, quantities and volumes.

Species	DBH	No.	Net Volume MBF
Black Walnut	10" - 35"	250	83
White Oak	10" - 54"	311	96
Red Oak	10" - 46"	147	40
Black Oak	10" - 40"	209	39
White Ash	10" - 46"	97	15
Beech	10" - 37"		139
Sugar Maple	10" - 34"	280	46
Yellow Poplar	10" - 44"	262	98
Black Gum	10" - 38"	25	5
Hickory	10" - 34"	417	40
Sycamore	10" - 34"	21	4
Elm	10" - 40"	26	5
Hackberry	10" - 26"	28	4
Kentucky Coffee Tree	10"- 22"	9	1
Cherry	10" - 22"	14	1
Butternut	10" - 14"	6	½
Miscellaneous	10" - 37"	88	3½ *
			620 MB F

* This volume has been appraised as sassafras and black locust posts.

Geographic and Geologic Features

The topography is quite rugged, tapering from the highest elevation at the southwest corner bordering the State Highway #37 and being a part of " Morgan's Ridge" of Civil War fame, in a northerly direction to Lick Creek which forms the northern boundary of the Indiana Pioneer Mothers' Memorial Forest except for the entrance from U. S. Highway #150. Within the 88-acre virgin tract are several sink holes of varicus sizes which have been produced gradually over centuries of time and without any visual evidences of disturbance to vegetative cover. These depressions in the earth's surface, together with their virgin cover, form the magnificent cathedral-like settings of real spiritual and inspirational value.

The soil is not an alluvial soil; it is residual and unglaciated. It is a mellow loam to silt loam over much of the area and is derived mostly from the decomposition of the sandstone stratum which overlies the limestone. The mellow, dark, porous, upper soil under the litter shows limestone influence but the soil is not free of stones; it contains many sandstone fragments, especially on the higher levels. Sinkholes under a sandstone-derived soil show that limestone underlies

the surface sandstone-derived mantle. On the lower levels, particularly in the bottoms of the dissecting valleys, the soil is limestone-derived, but even there is influenced by sandstone colluvium from above.

Description of 88-acre (more or less) Virgin Tract

Beginning at the northeast corner of Section twelve (12), Township One (1) North, Range One (1) West, Second Principal Meridian; thence along the east line of section twelve (12) South (S) nine (9.00) chains; thence Southwesterly twelve (12.00) chains to a point on the West line of the East Half of the East Half of the Northeast Quarter ($E\frac{1}{2}$ $E\frac{1}{2}$ $NE\frac{1}{4}$) of Section twelve (12); thence along said west line South (S) seventeen and five tenths (17.5) chains to the intersection of said west line and the North right-of-way line of State Highway #37; thence along the North line of said right-of-way Southeasterly eight (8.00) chains to a point on the East and West quarter line of Section twelve (12); thence along said quarter line East (E) seven (7.00) chains to the East quarter corner of said section; thence along the East line of Section twelve (12) North (N) five (5.00) chains to the West quarter corner of Section seven (7), T. 1 N., R. 1 E.; thence along the East and West quarter line of Section seven (7) East (E) fifteen (15.00) chains; thence North (N) twelve and five-tenths (12.5) chains; thence East (E) five (5.00) chains; thence North (N) ten (10.00) chains; thence Northwesterly twelve (12.00) chains; thence West (W) fifteen (15.00) chains to the point of beginning, containing eighty-eight (88.00) acres, more or less.

Recommendation

It is hereby recommended that this 88 (more or less) acre tract be formally set aside as a Natural Area under the name of Indiana Pioneer Mothers' Memorial Natural Area.

The establishment of this Natural Area will preserve one of the few vestiges of the primeval forest in Indiana and will preserve the unique, scientific and educational values inherent in a tract of land which is a living illustration of the original forest complex.

Scientific and educational use of the area by the public will be exclusive. General and promiscuous public use, which would be incompatible with the scientific use of the area, will be restricted as far as practicable. Simple trails and a few educational signs will constitute the only improvements within the area. No forms of commercial use will be permitted. The cutting of timber and grazing will be prohibited.

The area will be managed in its natural condition except for control of fire, insect or plant disease infestations; also possibly some dead and down timber will be removed and some erosion will be controlled, resulting from operations or changes in natural conditions on areas immediately adjacent to this area.

It is, therefore, recommended that the tract described in this report be set aside and designated as the Indiana Pioneer Mothers' Memorial Natural Area.

Rudolph H. Grabow — Forest Supervisor — Aug. 28-43 — Date

Leonard L Barrett — Director — 8-16-43 — Date

Jay H. Price — Regional Forester — 9-6-43 — Date

By virtue of the authority vested in me by Reg. U-4 of the Regulations of the Secretary of Agriculture relating to the occupancy, use, protection and administration of the national forests, I do hereby designate an area of approximately 88 acres lying within the boundaries of the Hoosier National Forest Purchase Unit in the State of Indiana, more particularly described in the attached report as the Indiana Pioneer Mothers' Memorial Natural Area; and it is directed that such area be administered in conformity with the requirements of said Reg. U-4 and the instructions issued thereunder.

LYLE F. WATTS
Chief, Forest Service

January 21, 1944
Date

By: [signature]
Acting

Cut E.E.C.

LEGEND FOR MAP SYMBOLS

— — — — — —	(Red)	Boundary of Indiana Pioneer Mothers' Memorial Forest of 258 acres.
————————	(Red)	Boundary of Indiana Pioneer Mothers' Memorial Natural Area of 88 acres.
. . . . .	(Red)	Soil Type boundaries.
. . . . .	(Green)	Timber Type boundaries.

Soil Types (in red)

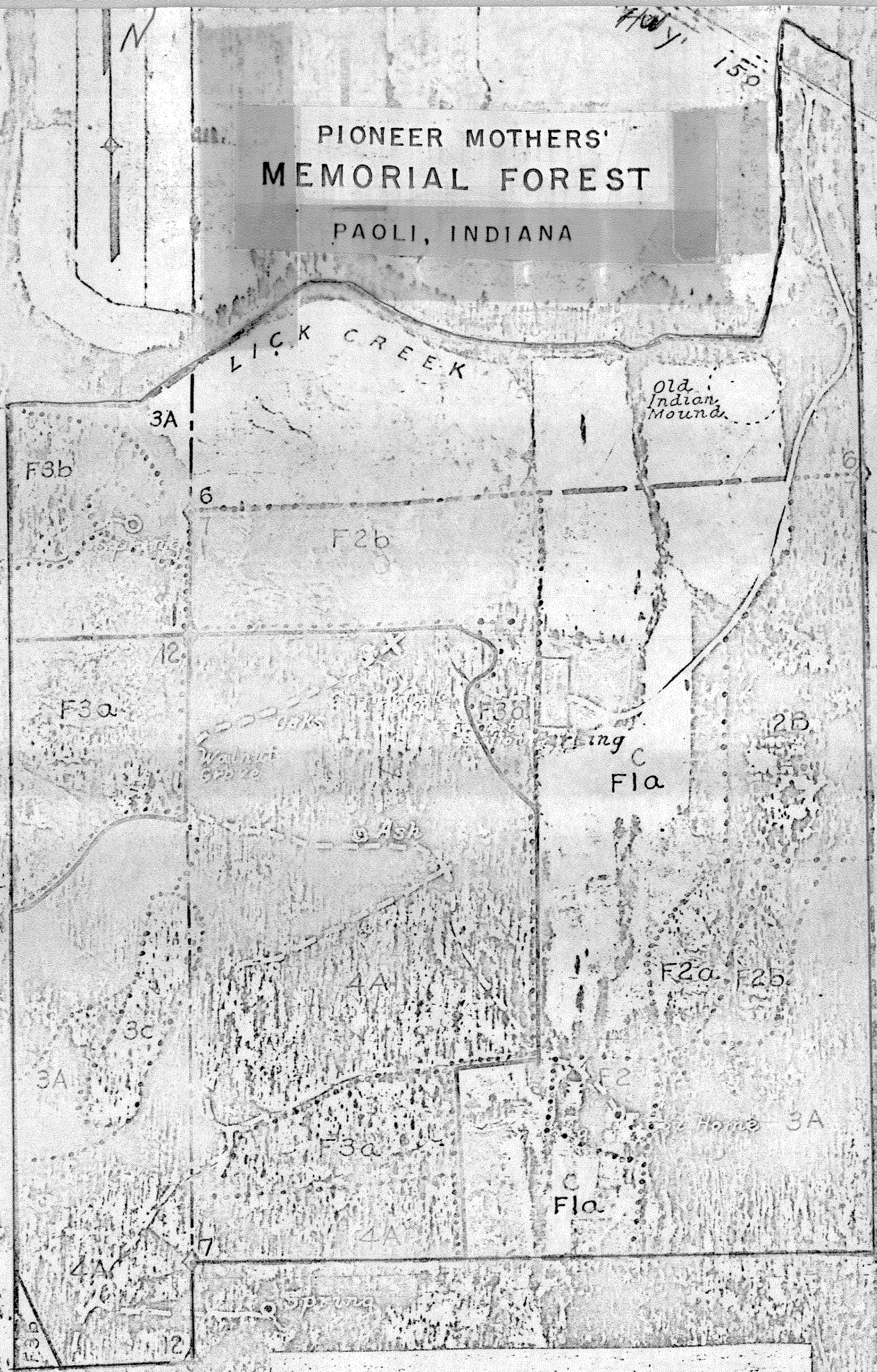
4A	Bottoms and coves - well stocked.
3A	Lower slopes - well stocked.
2B	Upper slopes - poorly stocked.
3C	Lower slopes - natural reproduction expected within 5 years.
F1a	Fields - Arable land lightly eroded.
F2	Fields - Open grass or weed field.
F2a	Fields - Open grass or weed field, lightly eroded.
F2b	Fields - Open grass or weed field, heavily eroded.
F3a	Fields - Brush field, lightly eroded.
F3b	Fields - Brush field, heavily eroded.

Timber Types (in green)

O	Grassland
1	Brush
4	Eastern Red Cedar
C	Cultivated
M	Bottom Hardwoods,- Sawtimber
Ma	Bottom Hardwoods - Reproduction
Mb	Bottom Hardwoods - Saplings

PIONEER MOTHERS' MEMORIAL FOREST

PAOLI, INDIANA



Two of the larger walnuts.

Samples of virgin growth of
yellow poplar.