
**NATURALIZED AMUR MAPLE
(*Acer ginnala* Maxim.) IN ILLINOIS**

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Amur maple (*Acer ginnala* Maxim.), a native of central and northern Manchuria, northern China, and Japan (Bailey 1949), is commonly planted throughout the northeastern United States. Fernald (1950) indicated that this species occasionally escapes from cultivation, while Flint (1983) suggested that this relatively trouble-free shrub to small tree requires little maintenance (week seedlings may be a problem). Amur maple is commonly planted throughout Illinois, although it is best-adapted to areas with relatively cool summers (Flint 1983).

Mohlenbrock (1986) mentioned that Amur maple has infrequently escaped from cultivation in DuPage, Jackson, and Union counties, Illinois. During the summer of 1987, a

few individuals of this species were found in a planted prairie in Coles County; in the summer of 1990, a relatively large population was observed in Moultrie County, Illinois.

The Moultrie County population is located 4 miles west of Illinois State Route 3 on the Bruce/Findlay road just to the east of the bridge over Lake Shelbyville (SW1/4 Sec 31 T13N R5E). The population is adjacent to an old homesite that was abandoned when the land was purchased for the construction of the lake in the 1960s. A specimen of Amur maple was collected from a large cultivated shrub at this site in 1969 (Dennis #698, EIU) soon after the property had been abandoned (Dennis 1974). The original cultivated Amur maple specimen is still present on the site but is now nearly dead. The main trunk (20.2 cm dbh) is hollow, the top branches are dead, and only a few basal branches remain alive.

An extensive population of Amur maple occurs at the Moultrie County site in an area that had been pasture prior to abandonment in the late 1960s. The main population covers an area approximately 40 m by 70 m; scattered individuals are found more than 400 m from there in a field that is in the shrub/pioneer tree stage of succession. In this field surrounding the Amur maple population, autumn olive (*Eleagnus umbellata*), boxelder (*Acer negundo*), slippery elm (*Ulmus rubra*), American elm (*U. americana*), and red haw (*Crataegus* sp.) dominate the woody vegetation. The Amur maple plants are widely scattered in this field and vary from small seedlings to shrubs more than 2 m tall. In open woods across the road and south of the successional field and the Amur maple population, numerous shrubs of autumn olive were found along with a very few small Amur maples.

Nested circular plots .001 ha and .01 ha in size were randomly located within the main Amur maple population. On the .001-ha plot all seedlings (>50 cm tall, <2.5 cm dbh) were counted; saplings (2.5–4 cm dbh) were tallied on the .01-ha plot. Amur maple seedlings averaged 11,667 individuals/ha, while saplings averaged 4167 individuals/ha. The saplings averaged four to

six stems each, some individual stems were more than 4 m tall, and many of these stems were 7–9 cm dbh. A basal cross-section was cut from two of the larger stems of Amur maple, and both were 20 years old. Other woody species encountered in the plots were red haw, autumn olive, green ash (*Fraxinus pennsylvanica*), and gray dogwood (*Cornus racemosa*), but all were in relatively low numbers.

No other large populations of Amur maple have been found in Illinois, but extensive populations were observed in and around the Soil Conservation Service's (SCS) Plant Materials Center, located just south of Elsberry in Lincoln County, Missouri. Some plantations of the maple are found at the SCS center, and numerous seedlings of Amur maple occur in the fields surrounding these plantings. Seedlings and saplings of Amur maple were also found in fields and open woods surrounding the SCS center. In one wooded area, just to the north of the center, Amur maple was relatively common, along with introduced honeysuckles (*Lonicera* spp.) and buckthorns (*Rhamnus* spp.).

Amur maple has the potential to become a major weed problem in the Midwest. This species produces numerous seeds, the seeds are disseminated widely, and seed germination and seedling establishment are common, particularly in open areas. In general, most naturalized populations of this species in Illinois are in open fields and prairies, but they also occasionally occur in open woods.

LITERATURE CITED

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