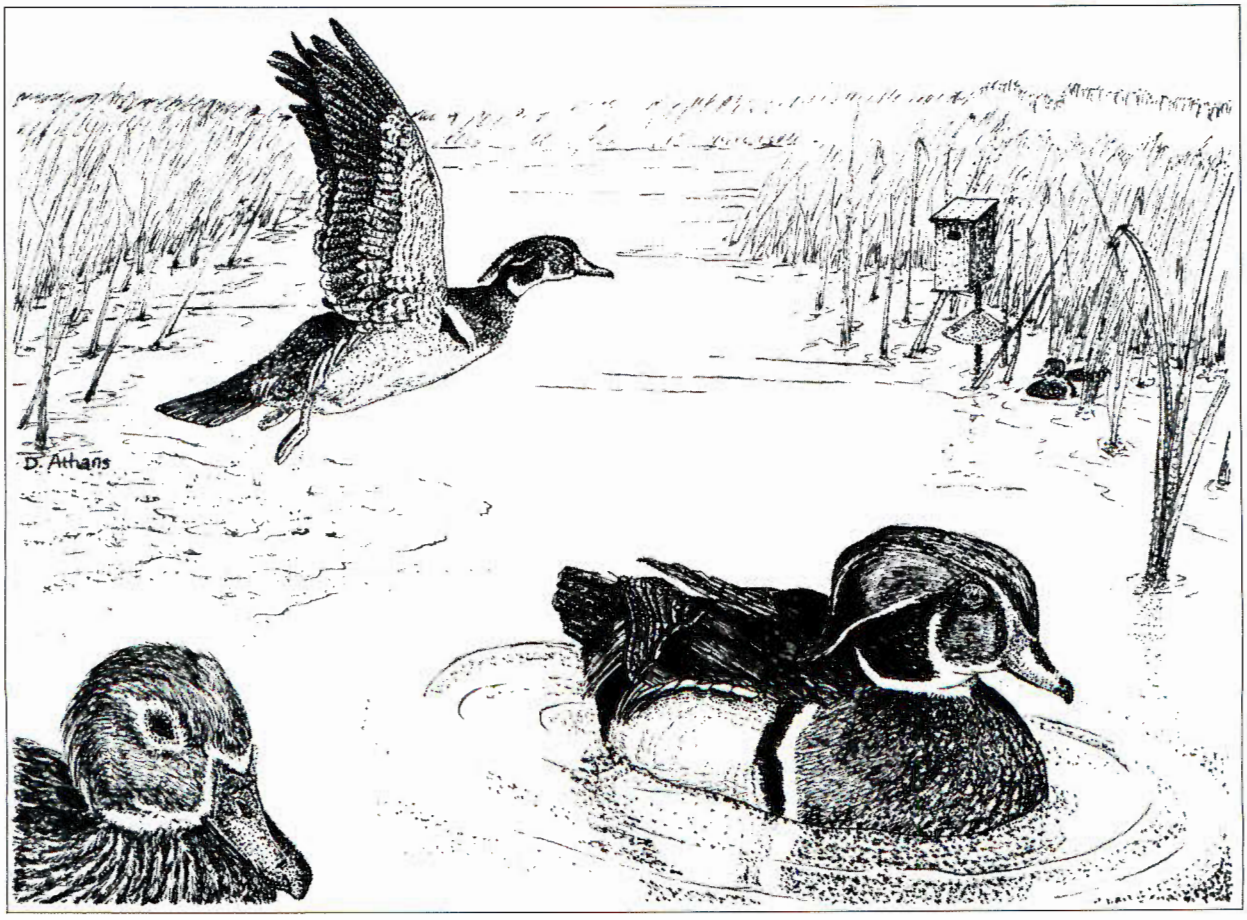
The remainder of the Illinois River floodplain consisted of 156,800 acres of unleveed areas, including lakes, and sloughs, and 33,000 acres of river surface.

By 1920, beds of pondweeds, American wild celery, and common hornwort in Peoria Lake had disappeared (Richardson 1921); by 1922, the wave of pollution that accompanied the diverted Lake Michigan water essentially removed aquatic life as far south as Chillicothe (Mills et al. 1966). Fortunately, urban and industrial pollution declined with the implementation of treatment plants by the Chicago Sanitary District in 1922. Navigation dams became operational above Starved Rock Lock and Dam in 1933 and below that point in 1938. These dams reduced the rate of flow of the river but maintained the elevated water levels that had resulted from the diversion, even when the amount of diverted water was reduced in 1938 (Bellrose et al. 1979).

Despite these negative impacts, the Illinois River remains an important migration area for waterfowl. The wetland plants found in the bottomland lakes are affected principally by fluctuating water levels, turbidity, water depth, and competition with other plants (Bellrose et al. 1979). Bellrose (1941) documented the importance of stabilized water levels to submergent aquatic plants, such as pondweeds, in the Illinois Valley. He also noted that American lotus, river bulrush, marsh knotweed, and arrowhead were among the aquatic species most tolerable to variable environmental conditions.

Unfortunately after the 1950s, aquatic plants virtually disappeared. Turbidity and softness of lake beds, the result of sedimentation, and altered water levels were responsible for the decline in vegetation (Bellrose et al. 1979). By the 1970s, the only plant beds usually remaining were those most tolerant of fluctuating water levels and turbidity — American lotus, river bulrush, and marsh knotweed — all poor



In the early 20th century, sewage effluent from Chicago was diverted from Lake Michigan and allowed to enter the Illinois River. This caused the flooding of thousands of acres of bottomland forest during the growing season, resulting in the loss of pin oaks and pecan hickories that produce mast for Wood Ducks, which breed in Illinois and are sensitive to increased water levels. Illustration by David J. Athans.