

BIOTIC ZONES AND DISTRICTS IN ILLINOIS.

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Temperature as a universal factor causes differences in the biota according to latitude, modified to some extent by elevation above sea-level, thus permitting the delimiting of life zones. In the United States the three principal zones in current acceptance are all represented in Illinois. Zones are limited according to distribution of characteristic species, and many species of each zone range into the borders of those adjacent to it. The ranging of Lower Austral and Transition species a considerable distance into Illinois should not be used as an argument for extending the boundaries of these zones over Illinois to such a distance as to unduly narrow the intervening Upper Austral zone, as some investigators have done in adjacent states.

Within the Upper Austral zone in Illinois, variations of soil, vegetal covering, and climatic conditions are definitely enough marked to permit the division of this area into a number of biotic districts; and these, together with the adjoining zones, give the following series from north to south:

1. Transition zone. Small area at northeast, including a large part of the Chicago area.

2. Northeastern sand area. About south end of Lake Michigan and headwaters of Kankakee River in Illinois.
 3. Western and northwestern sand areas. In Illinois and Mississippi river valleys, exterior to Wisconsin morainic border.
 4. Northern Prairie. Greater part of northern and central Illinois, as far south as latitude of Wisconsin morainic border in eastern Illinois.
 5. Southern Prairie. From the Northern Prairie to the Ozark ridge. The life approaches that of the sand regions.
 6. The Ozark Ridge and River Valley area. Life of southern type, and of rough, rocky forested ground, extending up the larger river valleys.
 7. Lower Austral zone. Area south of main Ozark ridge.
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