

Understanding Wisconsin Township, Range, and Section Land Descriptions

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This document is intended as a simple guide to understanding the basics of township, range, and section in Wisconsin, especially as they are depicted in many Wisconsin plat books.

Locations of land in most of Wisconsin are described using the Public Land Survey System, referred to as PLS or PLSS. This rectangular survey system was adopted by the Continental Congress in 1785. In Wisconsin, the PLS was conducted by land surveyors on the ground during the years 1833 to 1856 and represents the technology and surveying practices of that time. By legal definition, the PLS is the foundation for the description and conveyance of land ownership for most of Wisconsin.

Areas of Wisconsin that had already been surveyed using a different system prior to the PLS survey were *not* resurveyed, and the older system was left in place. In Wisconsin these older systems are known by a variety of different names: river frontage long lots, French land claims, Private Claims, Farm Lots, or French Long Lots—all of which were based on French land grants—and Indian reservation lots.

In Wisconsin land descriptions are referenced from two lines that are perpendicular to each other: the principal meridian, which generally runs north and south, and a base line, which generally runs east and west. Wisconsin's base line coincides with the southern boundary of the state. The 4th principal meridian is Wisconsin's east–west dividing line; it starts at the junction of Grant and Lafayette Counties in the south and extends northward through Outer Island in the Apostle Islands in Ashland County (fig. 1).

What is a township?

The original government survey of Wisconsin established township boundaries at 6-mile intervals

north of the base line and range boundaries at 6-mile intervals east and west of the principal meridian. Each approximately 36-square-mile area (6 miles by 6 miles) in this grid is called a *township* (or *congressional township*) and is identified by a township (T) number that indicates the number of townships north of the base line *and* by a range (R) number that indicates the number of townships east (E) or west (W) of the principal meridian. For example, Township 8 North (T8N), Range 12 East (R12E) identifies a township that has a northern edge approximately 48 miles (8 miles x 6 miles) north of the Wisconsin–Illinois border and an eastern edge approximately 72 miles (12 miles x 6 miles) east of the principal meridian (fig. 1).

A township is divided into 36 sections. Any given section in the state has as part of its location *one* township number and *one* range number. Each section would be 1 mile by 1 mile, or 640 acres—if the Earth were flat, and if the original survey had been perfect. Instead, mainly because of the curvature of the Earth, and also because of measurement error, corrections have been made to the size of the townships. All corrections are accumulated in the northernmost row and westernmost column of sections in each township (that is, sections 1, 2, 3, 4, 5, 6, 7, 18, 19, 30, and 31), so few of these sections are exactly 640 acres in size. In addition to minor corrections, five major correction lines have been established across Wisconsin. As a result, township boundaries (and section boundaries) do not always line up from one township to the next. For example, any township in the T20N row will not line up exactly with any township in the T21N row. For all but the southernmost of these correction lines, the farther east or west from the 4th principal meridian, the greater the east–west displacement. There is also a north–south displacement between R9E and R10E in all townships between T1N and T11N (fig. 1).

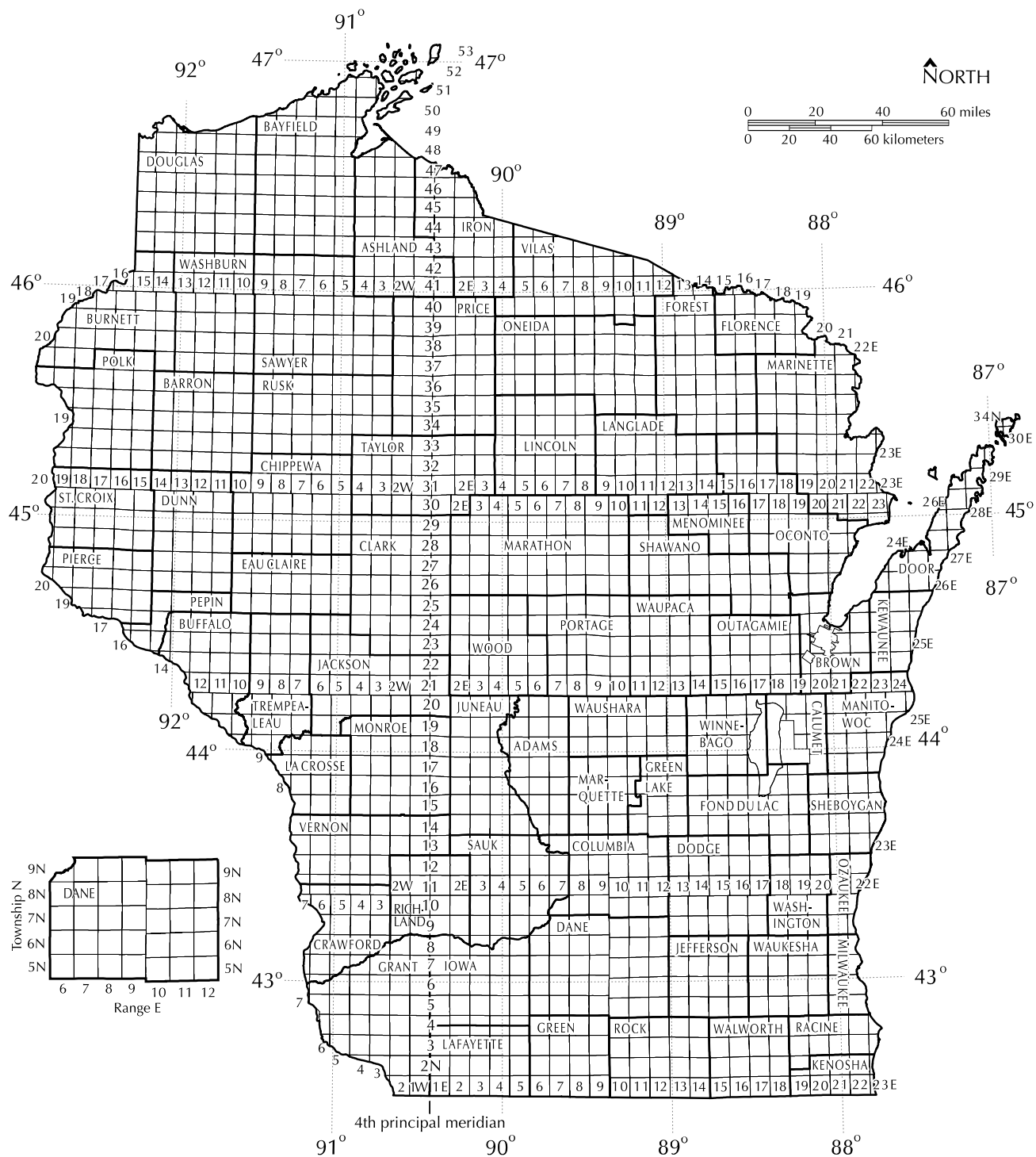


Figure 1. Index map of Wisconsin showing township and range lines and latitude/longitude; inset map is a slightly enlarged view of Dane County, emphasizing north-south offset of townships.

Government lots are tracts of land adjoining meandered bodies of water or can describe property in some undersized or oversized sections. For example, a correct legal description is Government Lot 3, sec. 6, T21N, R9E.

In Wisconsin the term *township* can refer to either an approximately 36-square-mile piece of land such as T8N, R5E or to the first half of the description that gives the location of a township, for example, Township 8 North. In Wisconsin the word *town* re-

WYOMING (eastern part) T7-8N-R3-4E

fers to a politically defined area of land, sometimes called a *civil town*. A congressional township's boundaries cannot be changed (except by an act of Congress). Town boundaries are frequently changed. Towns in Wisconsin are unincorporated (usually rural) areas outside villages and cities.

This terminology tends to cause a great deal of confusion. Many incorrectly refer to towns as “civil or political townships” because in many other states (such as Illinois) such political units are also called townships. A (civil) town may be larger or smaller than a township. As cities grow in size, land may be annexed from part of the surrounding town or towns. Boundaries of adjacent towns may also be changed over time.

Plat books—county atlases showing landownership information—generally contain maps that show either one township per page or one civil town (or part of a town) per page. In some counties (such as Dane), most towns are rectangular and coincide with a township. For example, all of the Town of Vermont is in T7N, R6E and all of T7N, R6E is in the Town of Vermont. As a result, T7N, R6E is sometimes *incorrectly* referred to as “Vermont Township.”

However, locations in most other counties may be more complicated, especially if a major river forms part of the county boundary or part of the town boundaries. When a plat book displays a civil town (rather than a township) on one page, it can be difficult to read locations correctly. For example, some Iowa County plat books display the eastern part of the Town of Wyo-

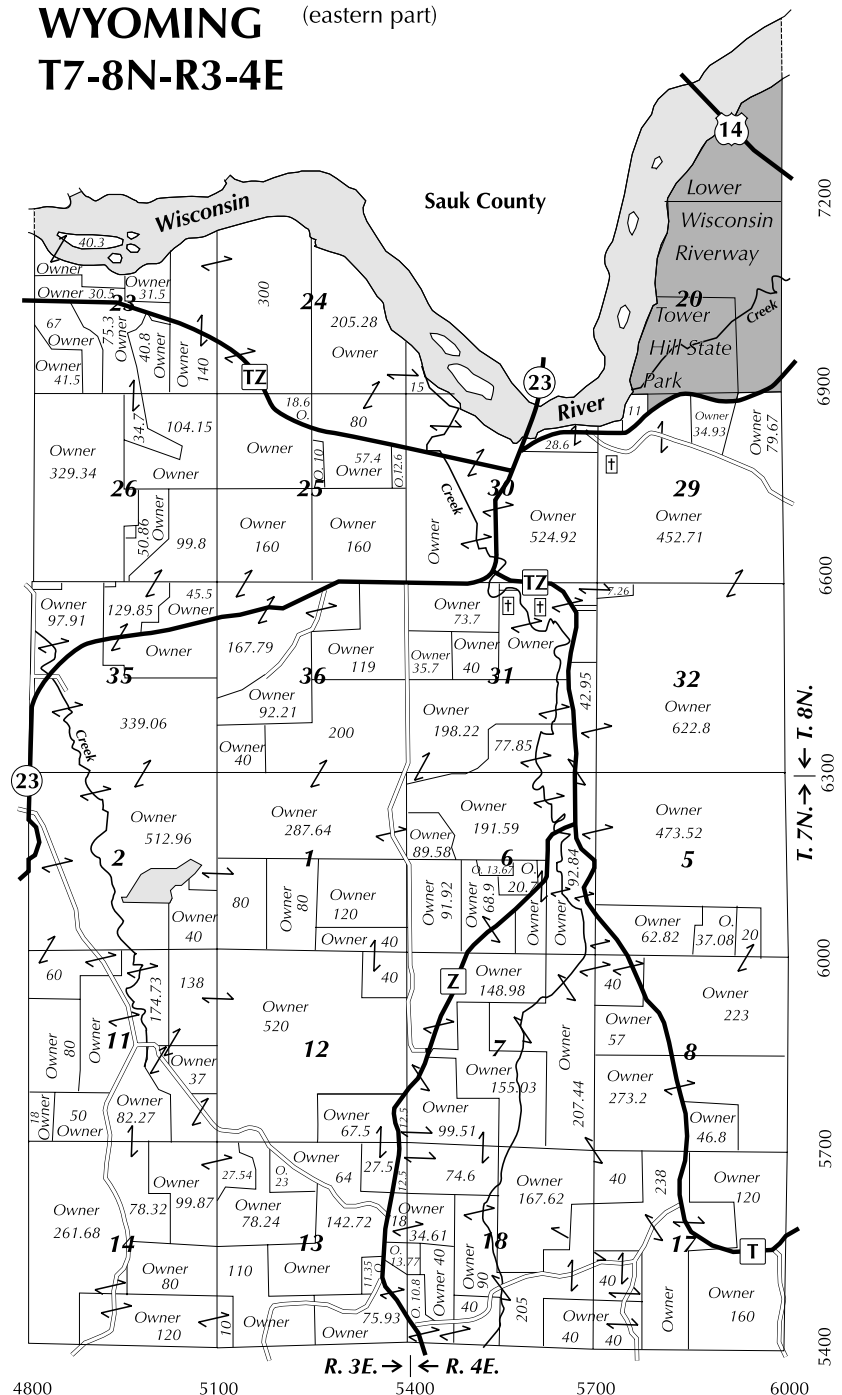


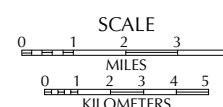
Figure 2. Hypothetical example of a typical plat book page.

ming on one page (fig. 2). The location title may be given as “Wyoming, T7-8N-R3-4E.” Such a page displays parts of four adjacent townships—T7N R3E; T7N R4E; T8N R3E; and T8N R4E. The township and range boundaries are marked on the sides of the plat book page.

Many plat books provide a page or more of information about land descriptions, but plat book companies prepare their publications for many states and may not individualize this information; therefore, what they provide may be incorrect for Wisconsin (for example, usage of civil “townships” instead of “towns”) or may not apply to Wisconsin (for example, townships south). However, in most cases plat books furnish a great deal of useful information about land descriptions.

22	23	24	19	20	21	22	23	24	19	20	21
27	26	25	30	29	28	27	26	25	30	29	28
34	35	36	31	32	33	34	35	36	31	32	33
3	2	1	6	5	4	3	2	1	6	5	4
10	11	12	7	8	9	10	11	12	7	8	9
15	14	13	18	17	16	15	14	13	18	17	16
22	23	24	19	20	21	22	23	24	19	20	21
27	26	25	30	29	28	27	26	25	30	29	28
34	35	36	31	32	33	34	35	36	31	32	33
3	2	1	6	5	4	3	2	1	6	5	4
10	11	12	7	8	9	10	11	12	7	8	9
15	14	13	18	17	16	15	14	13	18	17	16

Figure 3. The center of this diagram shows one complete township (36 sections) and the adjacent three sections in all directions (when townships align with one another). Sections 1, 6, 31, and 36 are numbered on many maps, such as 1:100,000 scale topographic maps, but the other section numbers may not be shown.



outer edges of a township so that you become aware of crossing from one township into another. For example, any section north of sections 1, 2, 3, 4, 5, or 6 is in an adjacent township that has a township number that is one number greater than the township to the south.

Some areas in Wisconsin do not use sections for legal descriptions; other systems of land description are in use. Examples of such areas are along the Fox River in Brown and Outagamie Counties, in western Calumet

How are sections numbered?

Understanding the numbering of sections in a township is one of the most important aspects of being able to read a plat book or a map correctly. Figure 3 shows the 36 sections of a township (in the center) and the next three sections in all adjacent townships. (This is applicable only for areas in which townships line up; adjoining townships may be displaced by as much as several miles.) When you are attempting to determine locations, you may find it useful to note the sections that form the

County, within the City of Portage, and in and north of the City of Prairie du Chien. (Further information about Brown County legal descriptions can be found in Wisconsin Geological and Natural History Survey Miscellaneous Map 44, *Green Bay Area Private Claims and Williams Grant Subdivision in Brown County, Wisconsin* [1997; scale 1:36,000]). In these locations you must use the local system of land description—it is not considered correct to attempt to create sections where they do not legally exist. ■

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