477 - BARBED WIRE/BALE TIES

477.1 IMACS Classification: Barbed wire should be entered under the encoding entry (WF) Barbed Wire. Bale ties and all other wire should also be entered under the encoding entry (WI) Wire.

477.2 Barbed Wire/Bale Ties and Dating:

Barbed wire and staples are used to contain or repel livestock but may have been primarily used as property boundaries.

"The innovation of the Bessemer steel making process in approximately 1876 had a tremendous effect upon the wire making industry (as well as iron and steel). Due to the lowering of production costs, it allowed for the production of a variety of wire products in large volumes (Clark 1949, Vol. III:124-125). Bale ties and barbed wire were among the products which had a florescence around this time, according to Washburn (1917:154-157). Washburn was an officer of Washburn and Moen Manufacturing Company which acquired most of the patents to the new wire technologies and he was a firsthand witness. Washburn, as an example, cites the first commercially made barbed wire in the United States as consisting of five tons in 1874. In 1876 his company acquired the patents and began production in quantity. A similar florescence in bale ties occurred and Washburn and Moen also held many of these patents. The descendent firm to Washburn and Moen is the United States Steel Corporation and much of its success was related to its wire products.

Wire rope, woven wire fencing, and other wire products were made by Washburn and Moen as the primary supplier. Wire rope became a major product in the 1880s with a major application to cable railways, which were first constructed in 1889 (Washburn 1917:159). Woven wire fencing was popular ‘...a few years later after barbed wire fluoresced’, which would be approximately 1880 (Washburn 1917:163)” (Buckles et al. 1978:444-445).

Chronology: (from Buckles et al. 1978:448)

| Post 1875: | Barbed Wire  |
| Post 1880s: | Bale Ties    |
|           | Woven Fence Wire |
|           | Wire Rope      |

"A number of books have been written on the subject of barbed wire (Glover 1969, Clifton 1973, and others). The patents on many variants of barbed wire are definitive but cultural lag is a problem in dating since early wires continued to be used long past their original patent dates” (Buckles et al. 1978:435).

Pertinent Notes on Recording Barbed Wire/Bale Ties:

If barbed wire is present on a site it indicates a date of post-1875. For specific patent dates refer to the references cited above. It should be kept in mind that the patent dates refer only to initial manufacture of that particular type of barbed wire, hence, they may be used to indicate a date no earlier than the patent date. For referencing patent dates, the type of barbed wire (or bale tie) should be drawn and described in the field while recording a site. These drawings can then be compared to the ones accompanying patent dates in various sources.