

# CHANGES IN VEGETATION AROUND KYOTO, JAPAN, OVER THE LAST 500 YEARS

OGURA Jun-ichi

Kyoto Seika University, Japan

E-mail: j-ogura@kyoto-seika.ac.jp

Although many historical documents describe the ancient city of Kyoto, Japan, few provide information on vegetation cover around the city before the early Meiji period (beginning in 1868). In this study, paintings, drawings and other materials from the late Muromachi period (early to mid-1500s) to the late Edo period (early and mid-1800s) were used to reconstruct the historical vegetation cover in Kyoto.

Paintings and drawings from those time periods do not always depict scenes realistically, especially with regard to vegetation. However, some works do provide good information on past landscapes, including land cover. A series of studies have considered and demonstrated the realism of such historical depictions, particularly through the use of comparative methods.

The works examined to reconstruct the historical vegetation of mountainous areas around Kyoto include the *SAISEN KARAKU MEISHO ZUE* (Reselected Album of Noted Places of Flowery Kyoto, 1864), *TEITO GAKEI ICHIRAN* (Elegant Sights of Kyoto, the first part: 1809, the latter part: 1816), *KARAKU ICHIRAN ZU* (A View of Flowery Kyoto, 1808), *YODOGAWA RYOGAN ZUMAKI* (Scroll Painting of the Yodo River and Its Vicinity, 1765), *RAKUGAI ZU* (Sights around Kyoto, ~1660), *UESUGI BON RAKUCHU RAKUGAI ZU* (Sights in and around Kyoto, formerly owned by the Uesugi Family, ~late 1540s), *MACHIDA BON RAKUCHU RAKUGAI ZU* (Sights in and around Kyoto, formerly owned by the Machida Family, from late 1520s to 1530s).

The study results suggest that the historical vegetation cover differed greatly from that of today, and that the vegetation cover changed relatively little during the period considered. During that period, mountainous areas around Kyoto had wide areas of sparse or low vegetation. Tall forests were uncommon, except around special areas such as near temples and shrines. Japanese red pine trees were common in such forests, indicating that those forests also formed under human impact. Such landscapes reflected the life and society of the time, when people depended heavily on trees, shrubs, and grasses from nearby areas and sometimes overused these resources.

Additional historical materials were available for studying the significant landscape changes that occurred during and following the early Meiji period (late 1800s). These materials include various documents, maps, and landscape photographs. Such materials provided useful information on past vegetation, although landscape photographs from the late 1800s are rare.

**Keywords:** Kyoto, Historical landscape, Land-cover changes, Paintings and drawings, Vegetation