里山と防火

SATOYAMA and Fire Prevention

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Summary: Satoyama (a Japanese term meaning as " mountain foothills" or "village woodlands" in recognition of the proximity of human-affected landscapes to rural villages) forests adjacent to cities have been gaining notice for both their greenery and their ability to act as habitat for animals and plants. However, due to little management, many flammable materials remain in these areas; they would make the chance of forest increase. In this study, the relationship between moisture contents and combustibility of litters on satoyama forest was experimented in the labo. Additionally, the fallen leaves of satoyama forests found at parks and other areas, and their cumulative quantities, were measured. Results of this study discovered that fallen satoyama forest leaves in early spring maintain more than 20% of their entire moisture content. However, a detailed look shows that their conditions differ depending on the condition of the local conservancy. In forests that are left to nature, although both the moisture content, one can still identify the hazardous nature of flame propagation due to high cumulative quantity. On the other hand, in forests where most foliage is removed, the moisture content of newly fallen leaves is low and they are easily flammable. The study found that conservoancy - leaving a proper amount of fallen leaves by mowing grass and banboo increases the moisture content and makes the fallen leaves less flammable, which lowering the hazards of starting and spreading fire.

(2002. 11. 2 受付, 20002. 12. 18 受理)