



01 **COMPLETE ENUMERATION**

每木調查 —)伐木作業 —)造材作業 **FELLING OPERATION** 04 05

02

LIMBING 06

03

集材作業 SKIDDING

> 鐵路運材 > 貯水作業 **RAILROAD TRANSPORTA-**



Installation SERIES OF WORKS 每木調查



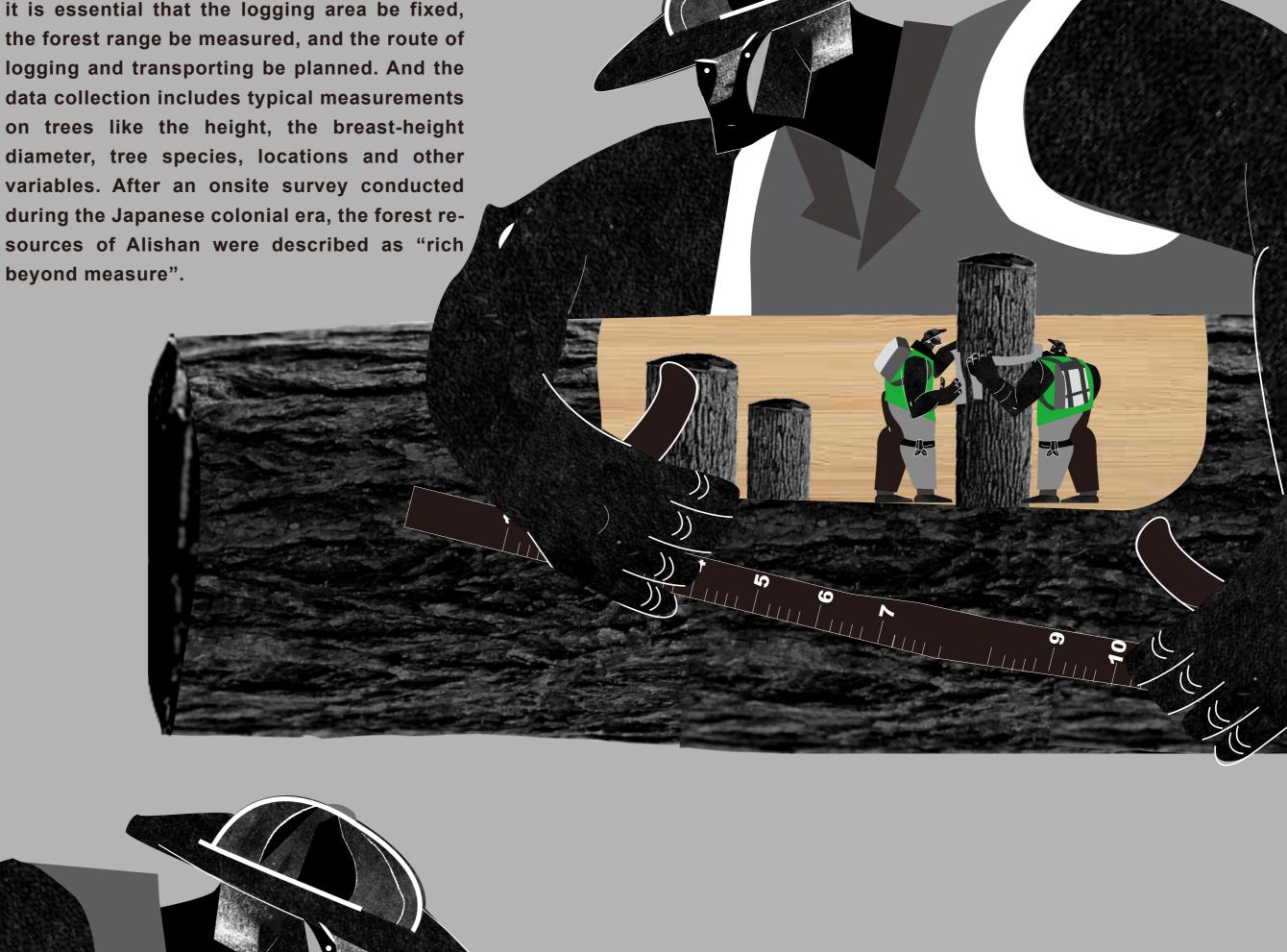
COMPLETE

地範圍、預定伐木路線、搬運路線,並 調查樹木位置、樹種、胸高直徑、高度 等資料,日治時期經實地調查,證實阿 里山森林資源「無盡藏」。

每木調查需先決定伐採區域,測量林班

Complete enumeration is a way of conducting the forest inventory. By complete enumeration, it is essential that the logging area be fixed,

on trees like the height, the breast-height diameter, tree species, locations and other variables. After an onsite survey conducted during the Japanese colonial era, the forest resources of Alishan were described as "rich beyond measure".





頭砍出「鴨嘴狀的缺口」,再鋸其 對面背口, 使樹木往缺口方向倒 下,保障作業人員的安全。 The felling operation begins when loggers

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伐木作業開始後,伐木工人先用斧

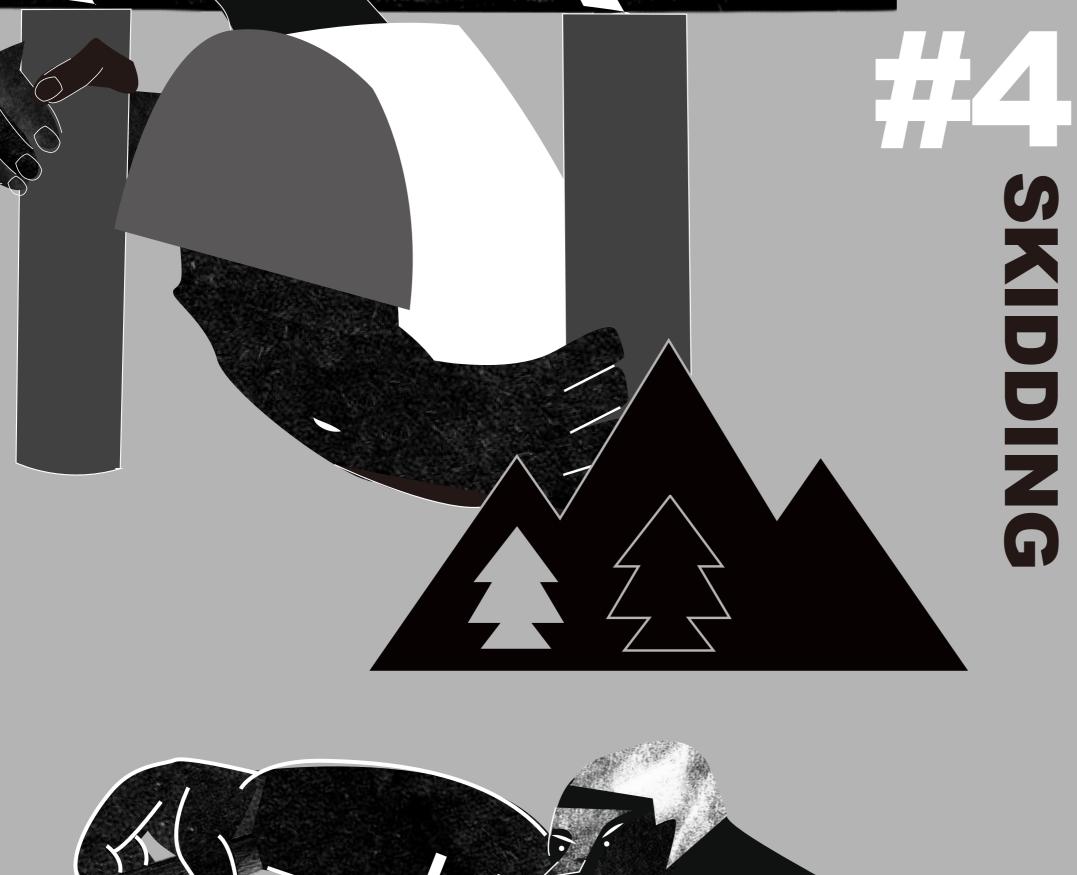
make a "V-shaped notch " on the side of

the tree by using an axe. The felling cut is made on the opposite side so that the tree falls in the direction of the notch cut to ensure the safety of all operators.

20

250

removed, the downed trees are cut into appropriate lengths for transportation. In the case of the Alishan Forest Railway, the trains carried logs no more than 8 meters long.



SERIES OF WORKS 集材作業是將分散於林場各處的木材

集運至森林鐵道所在處,可分為人力

集材與動力集材,阿里山林場自美國

購入蒸氣集材機,集材距離約300到

Skidding is the process of transporting the

cut trees from the cutting sites to the forest

railway station. It can be done manually or

mechanically. The Alishan Forestry Farm pur-

chased steam-powered skidders from Ameri-

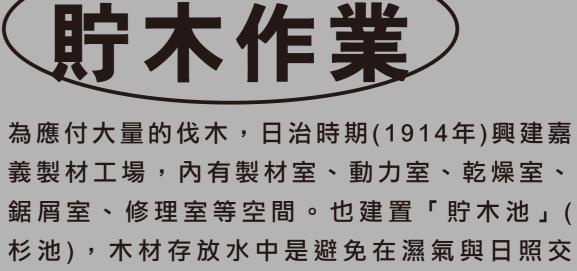
1500公尺範圍。

ca with a skidding range from approximately 300 to 1500 meters.



帶林、溫帶林。 The Alishan Forest Railway was completed in 1912. In the beginning, the railway was used to transport timber. Later,

the railway expanded its operation to passengers and freight transport. The railway's main line is approximately 72 kilometers long, climbing from the Beimen Station in Chiayi City at an elevation of 30 meters to Zhaoping at 2,274 meters above sea level, passing through tropical, subtropical, and temperate forests along the way.



SERIES OF WORKS

杉池),木材存放水中是避免在濕氣與日照交 互作用下開裂,同時防止蟲害蛀蝕、腐朽,維 持木材價值。 To cope with the large amount of logging, the Chiayi lumber factory was built during the Japanese colonial era (1914). The factory consisted of a sawmill, a power room, a drying room, a sawdust room, repair rooms and other spaces. A timber pond was also constructed to store timber. Wet storage helps prevent cracking and

slows deterioration caused by insects, and decay.