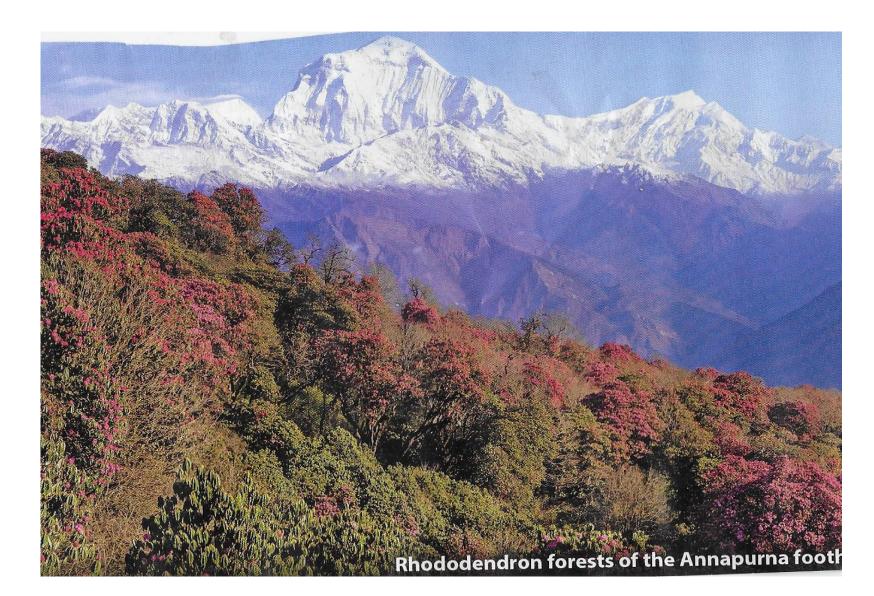
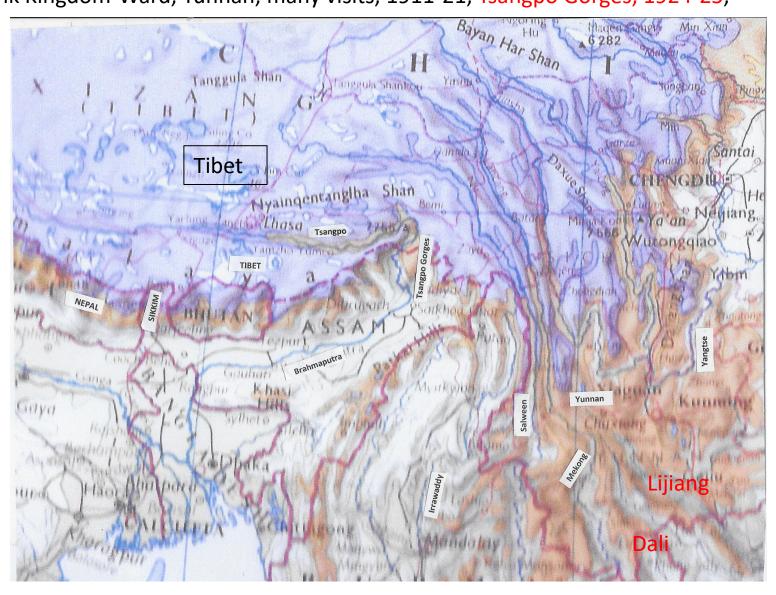
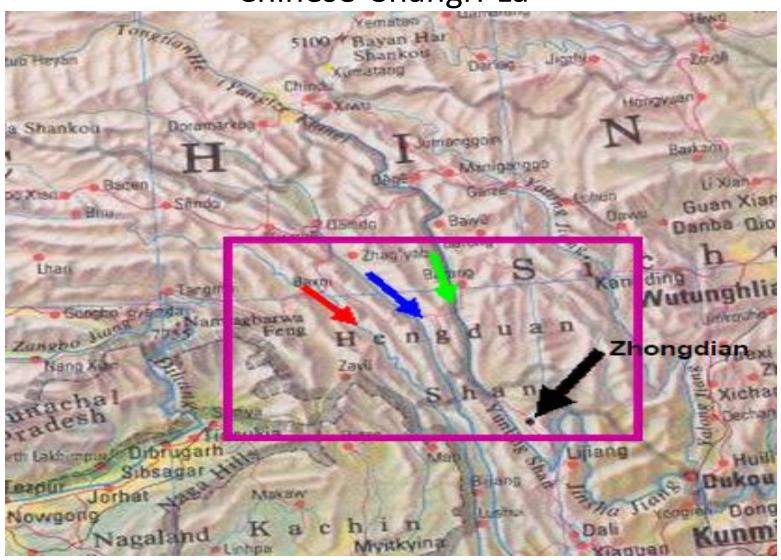
# Early Exploration of Himalayas by European Plant Hunters Chris Wagner

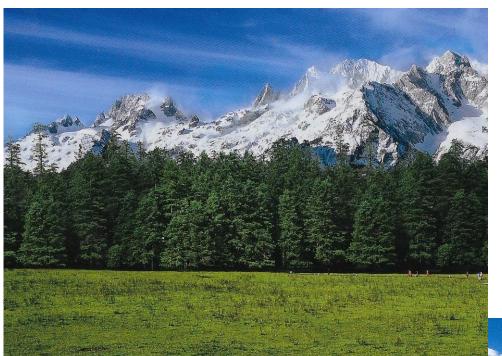


# Exploration in Eastern Himalayas by European Plant Hunters Sir Joseph Dalton Hooker, Sikkim, 1848-49, Assam 1850, George Forrest, Yunnan, many visits, 1904-32, Ernest Wilson, Sichuan Province, 1902 Frank Kingdom-Ward, Yunnan, many visits, 1911-21, Tsangpo Gorges, 1924-25,



Himalayan River Gorges (Plant Hunters) and Chinese "Shangri-La"





Eastern End of Himalayan Mountains

(Jade Snow Mountain)

First (Great )Bend of Yangtse)



# Eastern Himalayas Exploration-Timeline

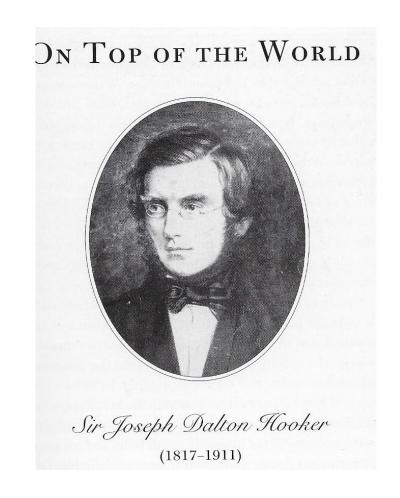
- Tibet, Bhutan and Sikkim- forbidden countries (particularly Tibet last country worldwide to be explored-mountains, lamaism and hostile ethnic minorities)
- 1848 Joseph Dalton Hooker to Sikkim
- 1867, 1874-5, 1878-82 Pundits (Survey of Tibet)
- 1904 British Invasion of Tibet (Sir Francis Younghusband)
- 1899-1910 Ernest Wilson In Sichuan, western China
- 1905, 1917-25 George Forrest in Yunnan, western China
- 1912 > Frank Kingdon Ward
- Mystery of Tsangpo Gorges (inc. Kingdon Ward, 1924-5)
   PLANT HUNTERS WERE THE MAIN (ONLY?) EXPLORERS OF THE OF EASTERN HIMALAYAS (for others challenge was solely to reach Lhasa, and this mainly across Tibetan Plateau)

## Joseph Dalton Hooker

- Born, Halesworth, Suffolk, 1817
- Chance encounter in 1839 with Darwin, close friendship
- 1839-1841, Assistant Doctor/Botanist on Ross's voyage, ships Erebus & Terror, to New Zealand, Australia and Antartic
- On return granted £400 per year from Treasury for two year exploration in Sikkim on behalf of Kew
- Left England 1847, befriended on boat by Lord Dalhousie, incoming India Governor-General
- Expeditions to Sikkim, 1848-49
- published Himalayan Journals
- Appointed Assistant Director at Kew 1855 and then succeeded his father, William, as Director in 1865

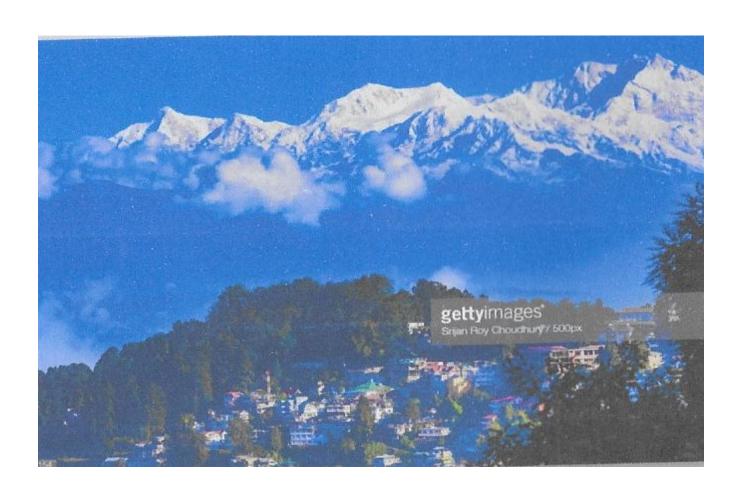
1880s saw popular "imitation" of rhododendron-cum Himalayan valley, inspired by Journal (responsible for rhododendromania)

Hooker considered most important botanist of 19<sup>th</sup> century



# Darleeling and Sikkim (Joseph Hooker, 1848-1850)

Sikkim closed (Lord Dalhousie's help needed with Rajah)



# Hooker's two Expeditions to Sikkim

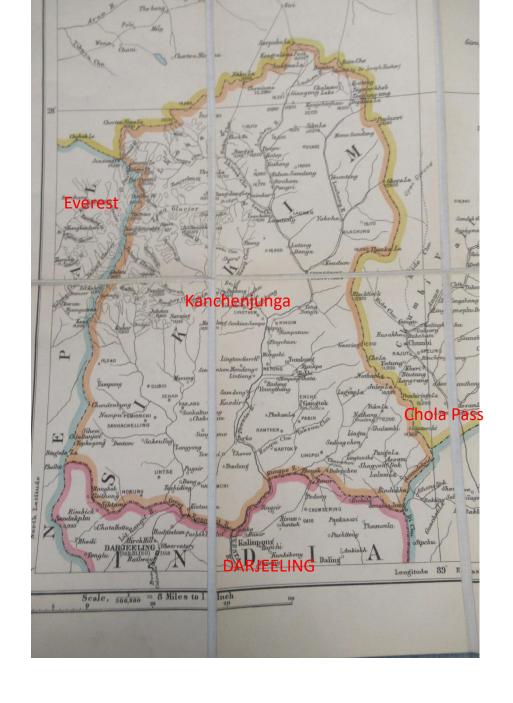
- Arr. Darjeeling April 1848
- •Refused entry to Sikkim by Rajah of Sikkim
- Appeal to Rajah by Lord Dalhousie rejected
- Threat of military action worked

#### !st Expedition

- Hooker entered Sikkim in October 1848
- •Travelled to west of Kanchenjunga
- Returned to Darjeeling January 1849

#### 2<sup>nd</sup> Expedition

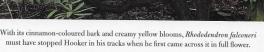
- started May 1849
- •To east of Kanchenjunga
- •Through capital. Tumloong, up to border with Bhutan (Chola Pass)
- Arrested in Tumloong
- •Arrived back in Darjeeling, Christmas Day 1849



## Robert Dalton Hooker in Sikkim









Hooker is best known for his rhododendron discoveries, but he also found several beautiful herbaceous species, including Primula capitata.

Rhododendrons, Sarcococca and **Primulas** 

## Joseph Hooker-Sarcococca

Sarcococca

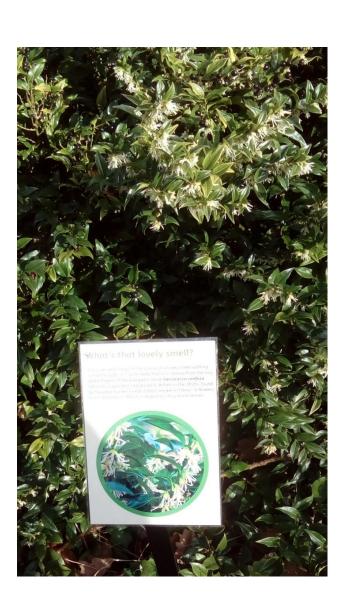
Confusa at

**Botanic Gardens** 

text on plaque said: "Collected by Hooker In late 1820s in West China"

wrong for both date (Hooker born 1817) and never went to West China)

corrected by Botanic Garden (email from Felicity Plant)

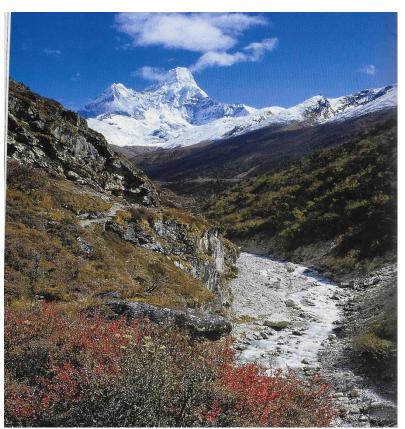


#### Sarcococca hookeriana



# Sikkim and Cragside, Northumberland

**Sikkim** 



Cragside, Northumberland



# Mapping of Tibet –No-go area (use of Pundits)

British Concern about Russians –important need for maps (where is Lhasa etc etc)

Use locals, well educated Tibetan-speaking hillmen (spies-Kipling's Kim)

Two years of training at Dehra Dun

- Sextant (and flat plane) and compass, stars, thermometer for boiling pt, clinometer
- distance based on number of paces, , use of Buddhist rosary-every 100 paces, one bead slipped, for a complete rosary (100 beads), 10000 paces or 5 miles in case of Nain Singh
- Records kept in hidden bottom of prayer wheel

"The Pundits-British Exploration of Tibet and Central Asia" by Derek Waller (in University Library)

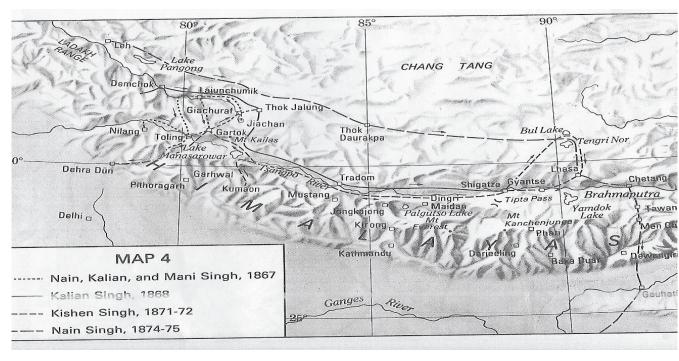


# Travels of Nain Singh and other Pundits

Nain Singh, 1867 and 1874-75

**Covered full length of Himalayas in Tibet** 

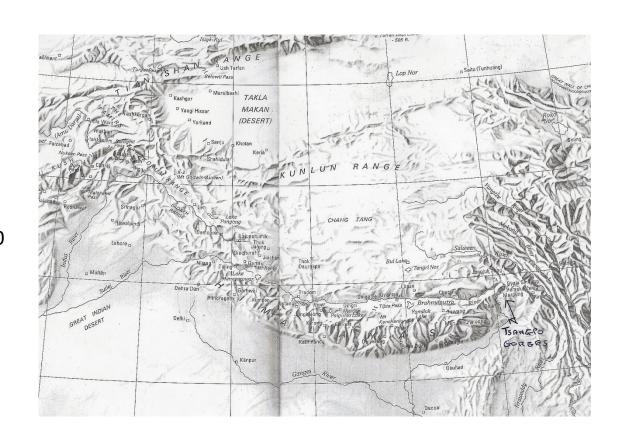




### Mystery of Tsangpo River

#### Mystery of Tsangpo River at its Eastern End

- Drains north facing slopes of Himalayas over 1600 Km
- Major debate in last half of 19<sup>th</sup> century over where it is disappeared-which river, Irrawaddy, Salween, Mekong or Yangste?
- At eastern end, on Tibetan plateau, altitude of river 10000 ft compared to 600 ft in plains of Assam (major waterfalls?)
- Brahmaputra could not be followed from downstream due to Abors and gorge



# Travels of Pundit Kishen Singh, 1878-82, to map Tsangpo river at its eastern end

- Need to map to determine if Tsangpo became Salween, Brahmaputra or Irrawaddy
- Not possible to descend Tsangpo Gorges
- Kishen Singh to drop logs at a specific time in upstream river and to be watched for in Brahmaputra (failed due to communications)
- Returned to Dehra Dun after 5 years absence

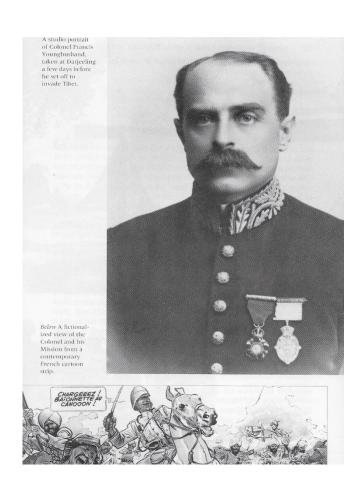


# British Invasion of Tibet 1904-05

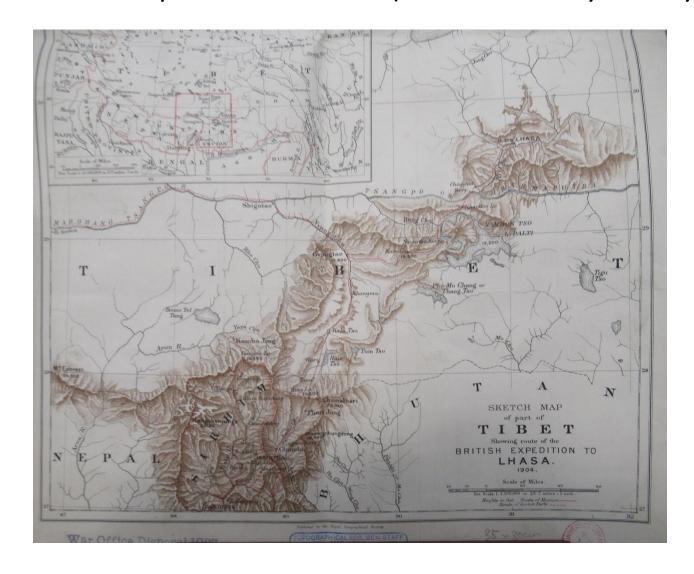
- Darjeeling to Lhasa, led by Sir Francis
  Younghusband ("the last great
  imperial adventurer")
- "The Great Game"-concern about possible Russian invasion
- Punitive Military Expedition (1200 troops, 16000 pack animals, 10000 coolies) over very high passes
- Total ignorance of Tibetan ways (Tibetan rebellion-lamas massacred missionaries, Manchu officials and converts)- Dalai Lama left country
- Eventual outcome-disastrous (Tibet ceded to China and ever since)

INVASION A STORY IN ITSELF

Younghusband



### Map of 1904 Expedition to Lhasa (from University Library)



# George Forrest and Ernest Wilson in Eastern Himalayan Foothills

#### **George Forrest, 1873-1932**

#### In NW Yunnan

1905 ( year corresponded with British Invasion of Tibet-Tibetan Rebellion with in Yunnan, Forrest nearly killed by lamas)

1917-19, 1921-2, 1924-5sponsored by Rhododendron Society

#### 1930 Final trip

Irritated by encroachment on "his" territory (NW Yunnan) by Kingdom Ward

#### **Ernest Wilson, 1876-1930**

- In Sichuan, 4 expeditions, 1899-1910
- Rhodrodrendron woods at Sheringham Park originally from seeds brought back by Wilson
- Also "handkerchief tree", as in Botanic Gardens

# Ernest Wilson, 1903-1905



Rhodrendron





The regal lily is worthy of its title. The delightfully scented and elegant *Lilium regale* was one of Wilson's favourite introductions and remains popular today.



The beautiful white bracts of the handkerchief or dove tree, *Davidia involucrata*, look ghostly set against fresh green spring leaves.

Handkerchief Tree

# Other Plants from Seeds Brought back by Ernest Wilson (Sichuan) and George Forest (NW Yunnan)

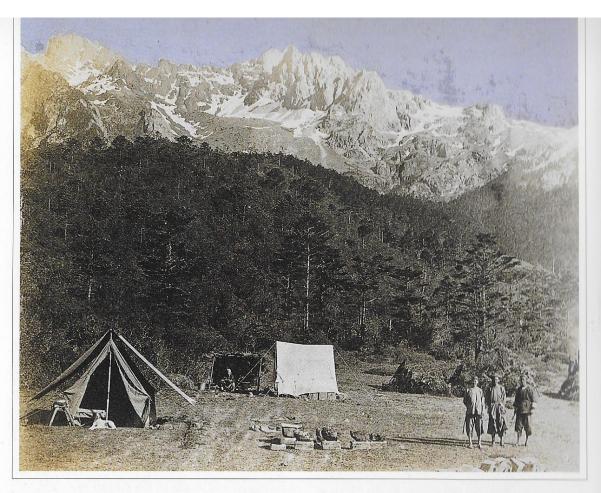
#### **Ernest Wilson**

- Many different Rhododendrons
- Primulas
- Vibernums
- Magnolias
- Clematis
- Dogwood
- Forsythia
- Azaleas
- Floribunda

#### **George Forrest**

- Orchid like primulas
- Rhododrendrons
- Gentiana
- Different Camellia
- Magnolia
- Different Primulas

### George Forrest, 1905, 1913, 1921-25



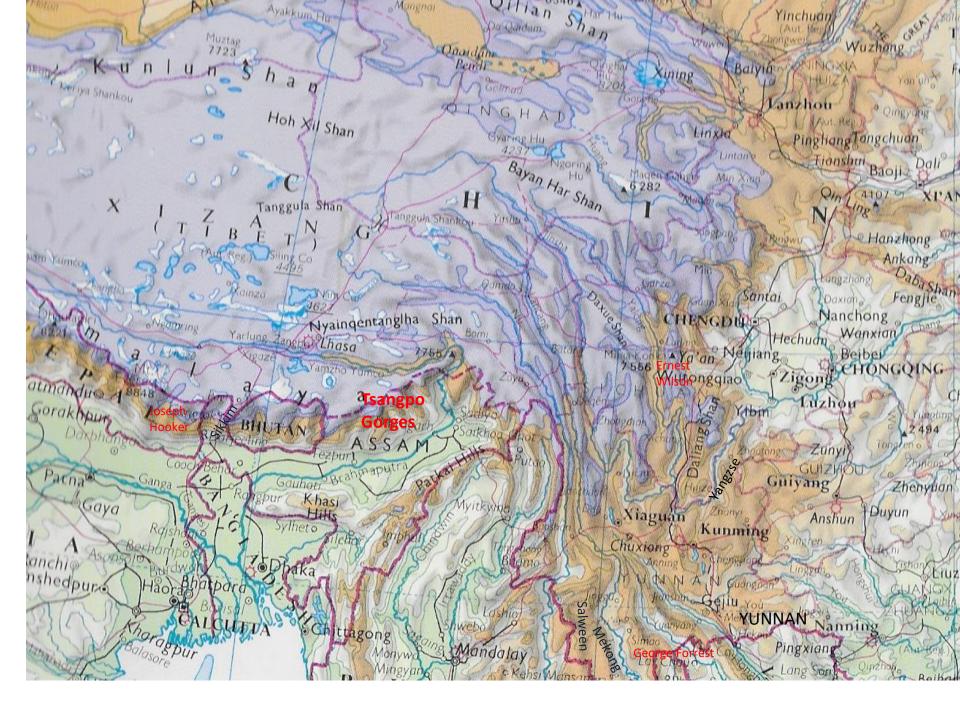
Forrest's camp in the Lichiang Mountains in north-west Yunnan. In the foreground are several of the team who helped Forrest throughout his explorations.



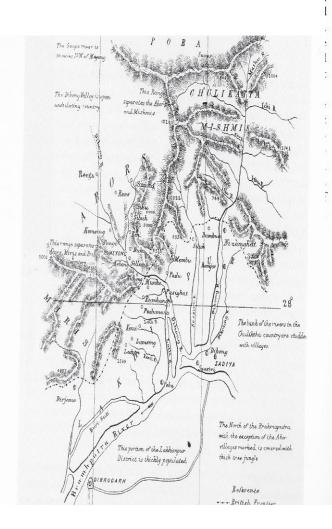
Despite the revolution that plagued his third trip to Yunnan in 1912, Forrest foun many gems, including the magnificent *Rhododendron sinogrande*.



Forrest was captivated by the azure blue flowers of Gentiana sino-ornata, perhaps south-west China's 19 prettiest alpine, which he discovered in 1910.



# **Abor Territory and Lamas**





Abor tribesmen.



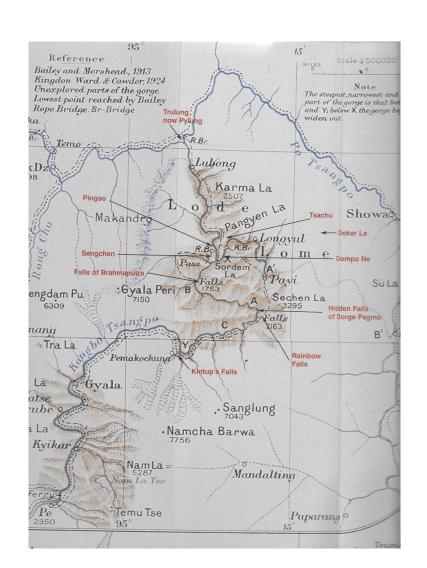
Marpung Monastery, where Kintup spent four months.

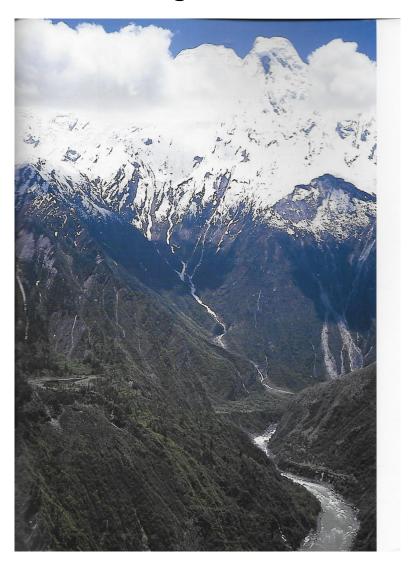
IB
At the monastery of Marpung, Kintup was saved from his pursuers by a benevolent lama who bought him for fifty

Bed at his movatery Kintup worked as a tailor and made several pilgrimages into remote parts of

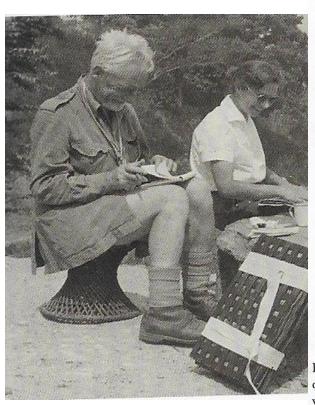
## Tsangpo Gorges-World's deepest

isolated, verdant, monastries, lamas, ethnic tribes-all unknown and mysterious-James Hilton's Shangri-La





### Frank Kingdon Ward, born 1885 (father, Chair of Botany at Cambridge), first trip 1909 eastern China, seeds to Cambridge, 1911-1950s, Yunnan and Burma (inc. War service) and also inc.1924-25 Tsangpo Gorges in Tibet, died 1958 and buried in Granchester



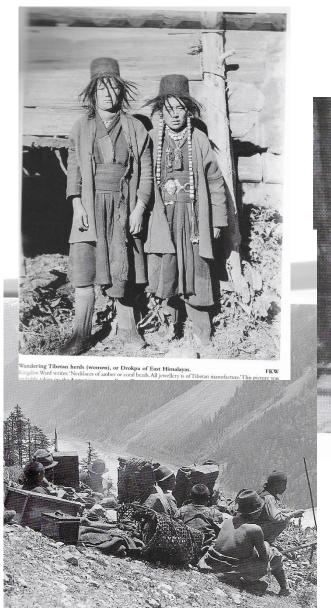


Kingdon-Ward was accompanied by his wife on several of his later expeditions. The photograph shows his sec wife, Jean, in Lobit Valley. Note the state of her shoes!



Ward: portrait of a professional plant

# Kingdon Ward and Lord Cawdor Tsangpo Gorges Expedition 1924-25





Tibetan Pilgrims. JC

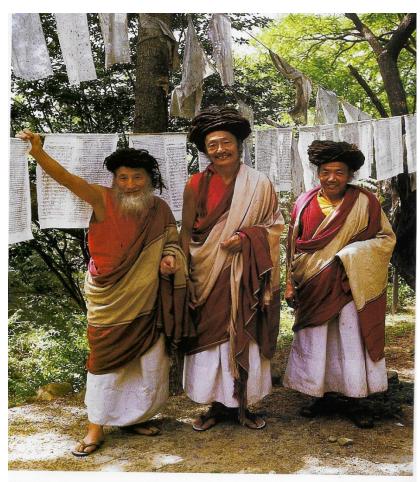


Lord (Jack) Cawdor (funded the expedition)

Tsangpo Gorges (colour photos from 1995 expedition\*)



# Tsangpo Gorges-Lamas

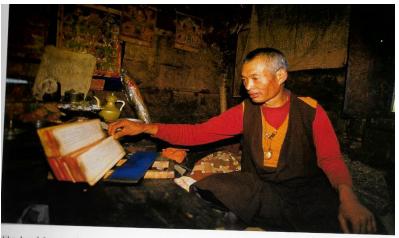


Lamas who practise Tantric Buddhism.



A lama performs a prayer ceremony at Gompo Ne.

KSJ



The head Lama of Payi.



Euphorbia wallichii near Kongbo Gyamda.

One of the most spectacular of the Himalayan spouth-east Tibet this occurs on barren rocky hillsides can survive. The caustic sap prevents grazing by an



#### Cotoneaster conspicuus.

This fine species of Cotoneaster was discovered a Ward in 1924-25 from Gyala. In cultivation it is var near prostrate to over 2m (6ft.). It was re-introduc



#### Rhododendron venator, a cultivated plant from Ludlow and Sherriff seed. KNEC

Collected by Kingdon Ward, this species was seen in flower by Ludlow and Sherriff in 1947 in the gorge where they described it as 'loose straggling tangled thickets'. It has been recorded only from the Tsangpo Gorge. In



Primula florindae (giant cowslip) was one of Kingdon-Ward's most successful discoveries. He named it after his first wife, Florinda.



#### Rhododendron megacalyx, a cultivated plant at Glendoick.

This species was discovered in Burma by Kingdon Ward and was desc in 1916. Ward found it again in the Tsangpo Gorge (KW 6286). One a most distinctive members of the large Maddenia subsection (most of v members have pale pink or white, often scented flowers), this special caretrised by the deeply veined leaves and the extended lower local to the large calyx (hence the name); the pink calyx (surrounding the bolla) can be clearly seen in this picture. A fine species with a sweet che can be grown outdoors only in mild climates. A good plant greenhouse or conservatory.

Plants from seeds brought back by Kingdon Ward, mainly fromTsangpo Gorges

# Frank Kingdom Ward



Primula florindae (giant cowslip) was one of Kingdon-Ward's most successful discoveries. He named it after his first wife, Florinda.

Contoneaster conspicuus, from Tibet, was one of Kingdon-Ward's finest shrubby introductions, with its elegant, arching branches and striking



# Tsangpo Gorges-Exploration Since Pundits

- Several unsuccessful expeditions until
- 1913 British Expedition confirmed Tsangpo was upper Brahmaputra (gorges not fully travelled)
- 1924-25 Frank Kingdom Ward and Lord Cawdor
- Several kayak expeditions, some with fatalities, until first full descent by international team in 2002
- Apparently still absolutely pristine (remains "Shangri-la")
- Talk of major hydropower project (more power than Three Gorges Project on Yangtse)

# Aftermath to 1905 Invasion

- 1912 Dalai Lama returns to Tibet.
- Next 38 years Tibet enjoys isolated de-facto independence (we are a small religious COUNTRY)-Everest Exploration from North Side (Tibet) until 1938
- !951 Chinese Invasion of Tibet. Dalai Lama into exile, escorted by Heinrich Harrer (*Seven Years in Tibet*)
- 1970s Over 2000 monasteries destroyed in Cultural Revolution
- Now Tibet, a tourist and trekking destination