

The US-Affiliated Pacific Islands (US-API) encompass a wide swath of the southern and western Pacific Ocean. These tropical islands are biodiversity hotspots and home to 419,000 people from diverse and vibrant cultures.

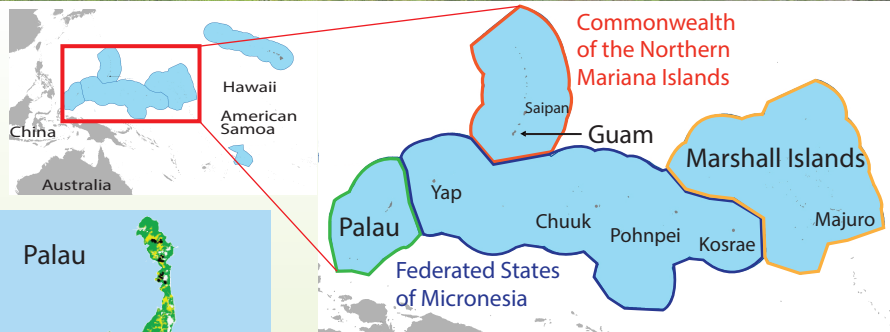


Figure 1. Map and detail of the US-API. Source: PacificRISA.org

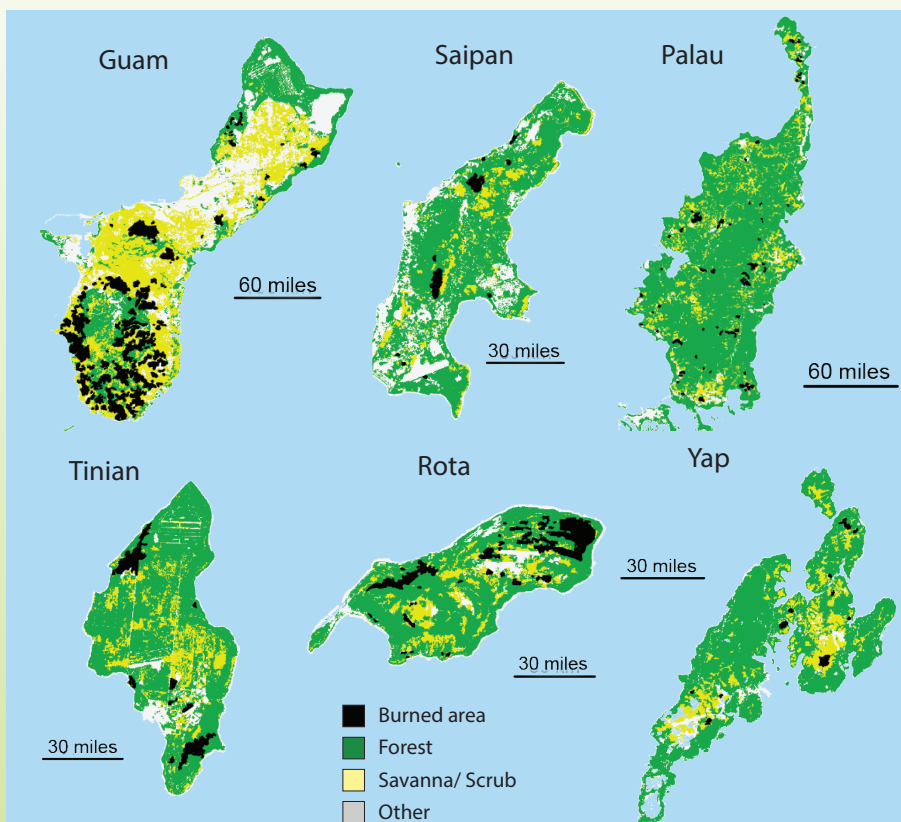


Figure 2. Island land cover, with areas burned by fires in 2019 indicated in black. Land cover data from LANDFIRE.¹

Table 1. 2019 Fires and Affected Areas, US-API

Island	Number of Fires ² (annual average)	Acres Burned (annual average)	Island Area Burned (annual average)	Acres Savanna Burned	Acres Forest/Shrub Burned ³ (Alien Forest)
Guam	396 (663)	9,323 (4,883)	7.1% (3.6%)	7970	873 (17)
Rota	60 (55)	1,717 (807)	8.2% (3.9%)	1163	246 (182)
Tinian	11 (27)	856 (560)	3.4% (2.2%)	4	2 (352)
Saipan	40 (19)	429 (450)	2.9% (1.9%)	3	-- (82)
Palau	98 (164)	537 (701)	0.7% (0.8%)	426	77 (N/A)
Yap	13 (33)	171 (484)	0.7% (2.0%)	148	12 (N/A)

¹Burned area per land cover type, estimated from 2010 LANDFIRE products requires field validation to confirm impacts. ²Defining 'average' fire activity is based on limited USAPI data: Guam has 28 years of fire data; Yap & Palau both have 8 years; & Rota, Tinian & Saipan each have 4 years. ³Includes where applicable: upland, plantation, limestone, ravine, mangrove, palm, scrub & shrub. Thanks to Christine C. Fejeran, Raphael Magofna, Susan Cordell, Julian Dendy, JB Friday, Coral Reef Research Foundation, Guam Forestry & Soil Resources Division, Guam Fire Department, National Park Service, Hawai'i Wildfire Management Organization, US Forest Service.

WILDFIRE & IMPACTS

Human activities cause almost all fires, mostly in savannas with the abundance of fine fuels. These fires also affect forest edges where (depending on intensity) trees may die and nuisance grasses and ferns may spread, thereby increasing future fire risk. Fires are most frequent in annual dry seasons (Dec/Jan to May) and are further exacerbated by intense drought. Fire threatens communities, native ecosystems and nearshore coral reefs via increased sediment run-off.

2019 WEATHER & WILDFIRE INCIDENTS ACROSS THE REGION (TABLE 1)

- In the last quarter of 2018 (and into January 2019 on Yap), monthly rainfall was above average possibly contributing to fuel buildup. Drought conditions persisted through July 2019, increasing fire potential.
- Overall, while savannas comprised most of the burned area, fires also burned a significant portion of both native and nonnative forest.¹
- Guam had heavy rainfall in February (Typhoon Wutip)

short-term relief from fire but potentially increasing risk from downed trees during the dry season. Although Guam had fewer fires, the burned area was nearly double the annual average. Several fires such as one that burned 715 acres impacted reforestation areas.

- Rota's burned acreage more than doubled. Tinian and Rota's burned acreage was significantly above average, while Saipan was close to average.
- Only Yap & Palau saw lower than average fire activity possibly due to less intense drought than other islands over the dry season.

2019 MANAGEMENT

Guam successfully suppressed some fires in anticipation of an active wildfire season, while re-establishing a tree canopy (to shade-out fires) and engaging the community (right) through out-planting, social media and public outreach (like *Munga Masongge Guåhan, Don't Burn Guam*).



Rota continued a ten-year successful project planting *Acacia confusa* in eroded badlands while monitoring human access to discourage fires. Palau experimented with shaded fuel breaks, revegetation & wildland fire suppression (as necessary). Yap worked with local villages to plant greenbelts with various tree species and experimented with lime and traditional mulching to improve tree growth in acidic, low fertility soils.