

MINISTRY OF AGRICULTURE AND FISHERIES FORESTRY DIVISION



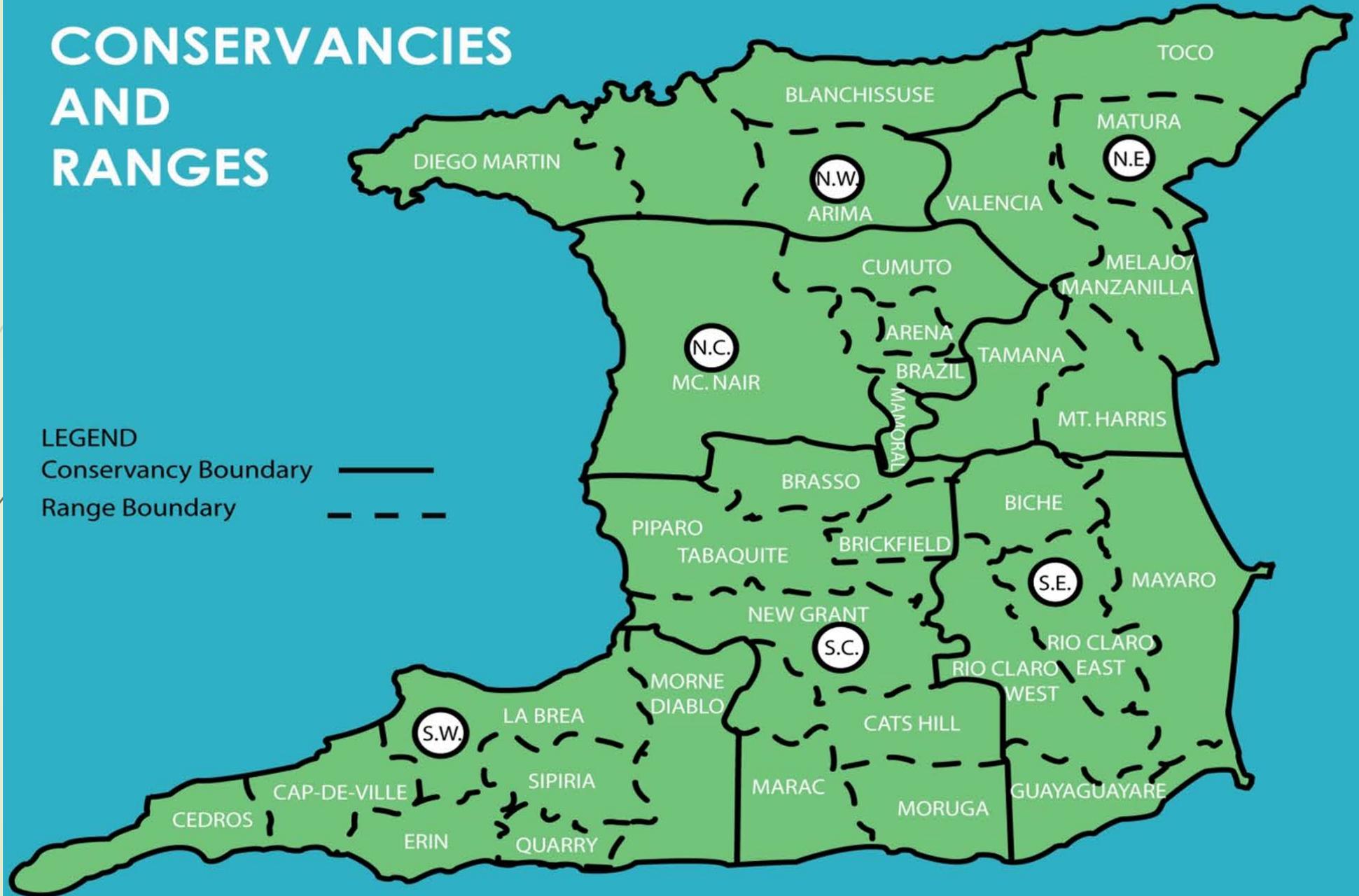


FORESTRY DIVISION MANDATE

- The Forestry Division manages the State's forests, wildlife, and national park resources, overseeing 192,000 hectares across 36 forest reserves, 13 wildlife sanctuaries, and other state lands.
- The Division sustainably manages the forest estate to optimize resources, use, support and regulate forest industries, conserve fragile ecosystems, preserve biodiversity, and educate the public on responsible use of the country's natural heritage.

CONSERVANCIES AND RANGES

LEGEND
Conservancy Boundary ———
Range Boundary - - - -



BIODIVERSITY

Approximately 100 mammal species (32 terrestrial; 65 bats)

467 species of birds (411 in Trinidad; 210 in Tobago)

93 reptile species, including 47 snakes (44 in Trinidad; 21 in Tobago)

37 amphibian species

Approximately 45 freshwater fish species and 400–500 marine fish species

Over 700 butterfly species (14 of the world's 15 families represented)

Approximately 2,160 species of flowering plants, 110 of which are endemic



Protected Areas, Wildlife Sanctuaries & Key Ecological Sites



Trinidad and Tobago has 13 wildlife sanctuaries, and to conserve its rich biodiversity, several key protected areas are designated for their ecological importance and role in wildlife and forest protection, including the following three significant sites:

Aripo Savannas – A unique savanna ecosystem with rare, fire-adapted plants such as the carnivorous sundew plant (*Drosera*), and high biodiversity, including a habitat for the Red-bellied Macaw (*Orthopsittaca manilata*) and other specialized species.

Caroni Swamp – A vital mangrove wetland that supports fisheries, coastal protection, migratory birds, and serves as a major roosting site for the Scarlet Ibis (*Eudocimus ruber*).

Nariva Swamp – The country's largest freshwater wetland, crucial for water storage and flood control, and home to endangered species such as the West



Migratory Species Importance & Species of Special Conservation Concern

Migratory Importance

Trinidad and Tobago lies along major bird migration routes between North and South America, with wetlands such as Caroni and Nariva providing essential feeding, breeding, and stopover habitats, while marine areas support migratory fish and marine mammals.

Key Species of Concern

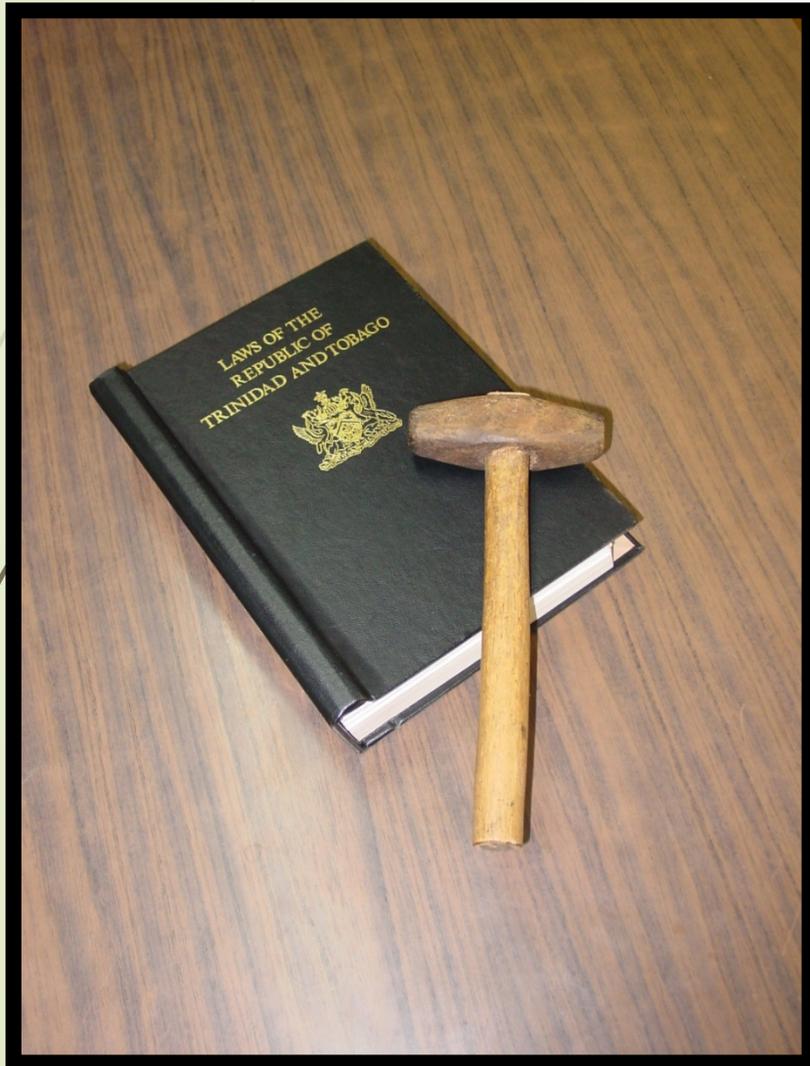
Blue-and-gold Macaw – Forest-dependent parrot threatened by habitat loss and illegal trade.

West Indian manatee – Endangered aquatic mammal found in coastal and freshwater wetlands like Nariva; threatened by habitat degradation and boat traffic.

Red-bellied Macaw – Associated with palm-dominated savannas; an indicator of



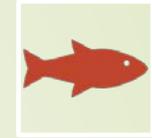
LEGISLATIONS WHICH GOVERN THE FORESTRY DIVISION



Forest Act,
Chapter
66.01 and
Amendment
s, Act 23/99



Sawmills Act
Chapter
66.02, and
Amendment
s, Act 24/99



Conservatio
n of Wildlife
Act Chapter
67.01



Agricultural
Fires Act
Chapter
63.02



Litter Act
Chapter
30.52



Environmen
tal
Managemen
t Act,
Chapter
65.05

Fire Season (Trinidad and Tobago)

Forest Fire Patrol Period

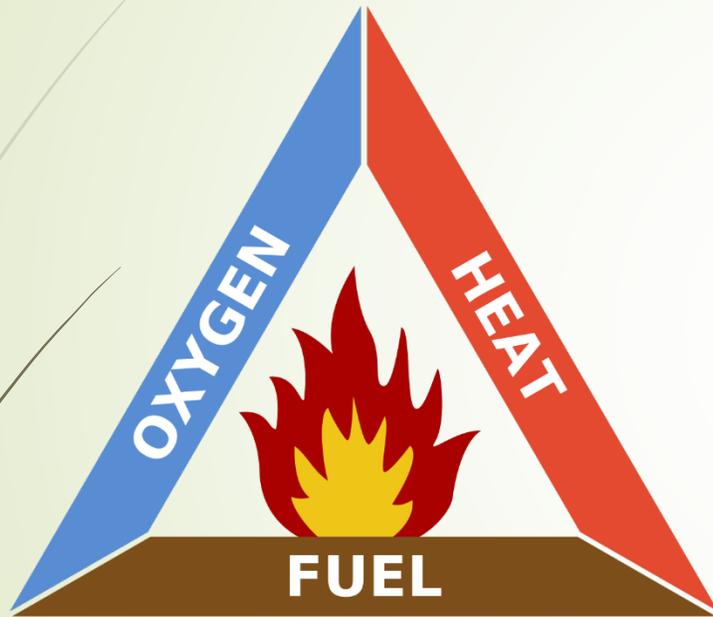
- Duration: December 1st of any year → June 30th of the following year.
- Purpose: Daily patrols to fight and deter the spread of forest fires.
- Focus Areas: “Hotspot” zones — sections of forest where fires frequently occur.

Notes:

- Patrols prioritize “hotspot” areas—sections of forest with frequent fire occurrences.
- Special attention is given to young plantations in Forest Reserves.



Fire Triangle



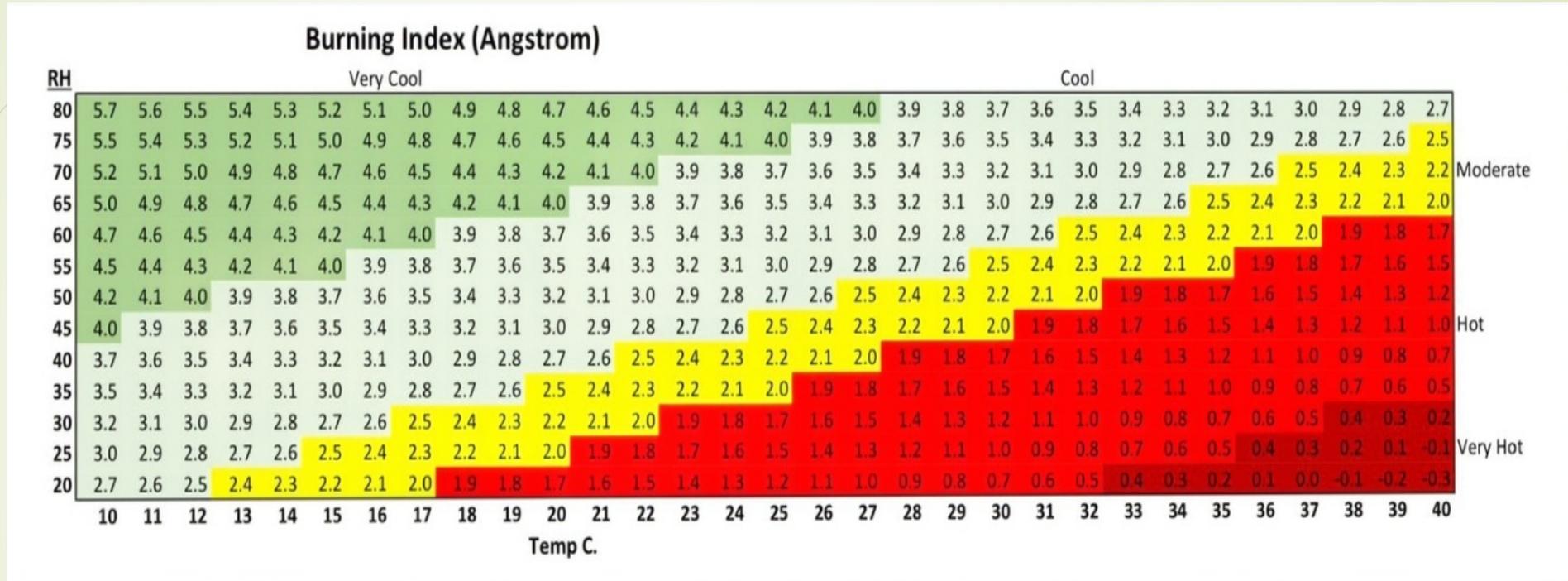
- **Heat** – Raises material to ignition temperature (e.g., flame, sparks, hot weather).
- **Fuel** – Any combustible material (dry grass, leaves, wood, debris).
- **Oxygen** – Air supports and sustains combustion.

Principle:

- Fire occurs when heat + fuel + oxygen combine.
- Remove any one element → fire cannot start or will go out.

Fire Behavior & Safety

Angstrom Index.



- **Angstrom Index:** A basic number used to estimate wildfire risk.
- **What it uses:** Air temperature and relative humidity (moisture in the air).

Key idea:

- High Temperature + low humidity = drier vegetation.
- Drier conditions = higher chance of fires starting and spreading

Fire Towers in the Forestry Division

Primary Functions of Fire Towers:

1. Early Detection: Continuous surveillance allows prompt identification of wildfires.
2. Rapid Reporting: Fires' locations and potential spread are quickly communicated to response teams.
3. Monitoring: Observation of fire behavior and weather conditions helps assess risk and guide action.
4. Coordination: Towers assist in directing firefighting resources efficiently to affected areas.

Fire Tower Locations:

- Mount Tabor – St. Benedict
- St. Michael – Tacarigua
- Kernaham Field Station – Nariva Swamp



These towers, in coordination with ground patrols, are critical for preventing the spread of forest fires, especially in hotspot areas and young plantations.

Fire Suppression

➤ High-Risk Months:

- March to May are recorded as the driest months.
- During this period, monthly-paid and daily-rated staff are required to work on Fire Patrols on a roster basis for the full three months.

➤ Fire Tracing Operations:

- Conducted from early December through January, especially in young plantations.
- Tracing width ranges from 30 to 50 feet, creating firebreaks to control fire spread.

➤ Equipment and Safety Checks:

- Fire suppression tools, equipment, and PPE are inspected and replaced as needed to ensure readiness.





Objectives of the Forestry Division Fire Programme

- **Prevent and control forest fires** through proactive measures and rapid response.
- **Protect young plantations** from fire damage.
- **Maintain readiness** for effective fire response.
- **Educate and engage the public** on wildfire prevention.
- **Reduce environmental and economic losses** from fires.

Effects of Forest Fires

- **Vegetation and habitat loss** – Fires destroy plants and wildlife habitats, disrupting ecosystems.
- **Soil degradation and erosion** – Burned soils lose nutrients and are more prone to erosion and flooding.
- **Air and water pollution** – Smoke and ash contaminate air, rivers, and water supplies.





Fire as a beneficial management tool

- **Firebreak maintenance** – Use low-intensity fire to clear strips of land that slow or stop wildfire spread.
- **Ecosystem restoration** – Fire stimulates regeneration of fire-adapted plants and maintains healthy habitats.
- **Agricultural land preparation** – Safely remove crop residues and invasive growth before planting.
- **Prescribed (controlled) burning** – Intentionally burn excess dry vegetation to reduce fuel and wildfire risk.

Forestry Division Fire Data

▶ HOTSPOT AREAS

▶ Diego Martin & Northern Range

▶ South-west and south-central forest lands

▶ Fondes Amandes Area

▶ Northern/Interior Forests Reserves and Plantations

2022		2023		2024		2025	
Number of Fires	HA Burnt						
25	69.83	66	341.50	59	462.70	24	78.0
2	1.1	32	54.14	50	66.72	2	3.0
15	19.9	49	142.25	124	744.63	46	165.56
19	92.25	84	817.31	72	589.10	40	934.40
6	12.1	8	25.75	78	135.11	27	44.32
28	101.51	95	404.30	199	1637.73	78	341.20
NIL	NIL	40	112.90	26	114.42	15	27.6
95	296.69	374	1598.15	608	3750.41	232	1594.08



What you can do !!!!!

- ▶ **Report fires immediately to authorities.**
- ▶ **Clear vegetation and debris around homes and farms to reduce fuel.**
- ▶ **Follow fire regulations and advisories issued by authorities.**
- ▶ **Supervise children and activities that could start fires.**



Protecting The Environment, Securing
Our Future