

farsite	<p>S: G: [Eigenname eines GIS-integrierten Computerprogramms; USA] F:</p> <p>A computer-based fire simulation program, developed in the USA, that can be integrated with GIS</p>
feeling for fire	<p>S: [buscar puntos calientes al tacto], palpar puntos calientes G: Handprobe F: prospection des braises</p> <p>Examining burned material after the fire is apparently out and feeling with the bare hands to find any live embers.</p>
female coupling	<p>S: racor hembra, copla hembra G: Kupplungsteil mit Innengewinde F: raccord femelle</p> <p>Hose coupling made to receive a male coupling of the same thread, pitch and/or diameter</p>
fermentation layer (f-layer)	<p>S: G: Fermentierungs-Horizont F:</p> <p>The top layer of duff directly below the litter and above the humus, comprised of partially decomposed organic matter whose origins can still be visually determined (cf. Litter).</p>
final run	<p>S: G: Letzter Anflug F:</p> <p>A live fire bombing run where the pilot intends to drop the load; also applies to cargo dropping.</p>
fine fuel	<p>S:</p>

	<p>G: Leichtes, schnell entzündliches Brennmaterial F:</p> <p>Fast-drying dead fuels, generally characterised by a comparatively high surface area-to-volume ratio, which are less than 0.5 cm in diameter and have a timelag of one hour or less. These fuels (grass, leaves, needles, etc.) ignite readily and are consumed rapidly by fire when dry. (cf. Flash Fuel, Medium Fuel, Heavy Fuel)</p>
fine fuel moisture	<p>S: humedad del combustible ligero G: Feuchtigkeitsgehalt des schwaches Brennmaterials (Zeitverzugsklasse kleiner oder gleich 1 Stunde) F: teneur en eau des petits combustibles (fins)</p> <p>The measured moisture content of fast-drying fuels which have a time lag constant of one hour or less. Includes grass, leaves, ferns, tree moss, draped pine needles, and small twigs.</p>
Fine Fuel Moisture Code (FFMC)	See: under Canadian Forest Fire Weather Index Table
fine particulate matter	<p>S: G: Luftpartikel kleiner als 10-15 micron F:</p> <p>Particles of less than 10-15 µm (microns) in size. Fine particles have longer residence time in the atmosphere, are more harmful to health and have greater impact on visibility than larger particles. "Inhalable particulate" matter are those particles less than 10 microns in diameter. "Respirable particulate" matter are those particles less than 2.5 µm in size. Respirable particulates have an especially long residence time in the atmosphere and penetrate deeply into lungs. Particles from smoke are primarily in the respirable size range. Aerosol is often used interchangeably (cf. Aerosol).</p>
finger (of a fire)	<p>S: dedos de un incendio G: Feuerzunge F: feu (=incendie) langues de feu</p> <p>See under Forest Fire</p>

fire	<p>S: G: Feuer F:</p> <p>Simultaneous release of heat, light, and flame, generated by the combustion of flammable material</p>
fire adaptation	<p>S: G: Feueranpassung F:</p> <p>Common term for fire-resistant or fire-dependent plant and animal species</p>
fire agency	<p>S: servicio de incendios G: Behörde, zuständig für Brandbekämpfung F: service d'incendie</p> <p>An official group or organization compelled and authorized under statutes of law, the responsibility for controlling fires within a designated area or upon certain designated lands</p>
fire analysis	<p>S: analisis de un incendio G: Auswertung eines Feuerereignisses F: (analyse) critique d'un incendie</p> <p>A review of fire management actions taken with respect to a specific fire, group of fires, or a fire season, in order to identify reasons for effective and ineffective actions and to recommend, or prescribe ways and means of increasing efficiency.</p>
fire atlas	<p>S: coleccion de mapas, mapoteca G: Feueratlas, Feuerkartierung F: atlas d'incendies</p>

	A systematic compilation of fire occurrence data ordered by time and space on a map or a geographic information system for fire management and policy planning and decision support
fire authority	<p>S: autoridad en el incendio G: Ermächtigung, Zuständigkeit zum Einsatz von Löschkraften F: autorite chargee de la lutte contre les incendies</p> <p>The authorisation given to different levels of fire management to determine, adjudicate, or otherwise settle issues for the use, or co-ordination of use, of fire fighting resources</p>
fire beater	Syn. Fire Swatter
fire behaviour	<p>S: comportamiento del fuego G: Feuerverhalten F: comportement du feu</p> <p>The manner in which fuel ignites, flame develops and fire spreads and exhibits other related phenomena as determined by the interaction of fuels, weather, and topography. Some common terms used to describe fire behaviour include the following: Smouldering - A fire burning without flame and barely spreading. Creeping - A fire spreading slowly over the ground, generally with a low flame. Running - A fire rapidly spreading and with a well-defined head. Torching - Ignition and flare up of foliage of a single tree or a small clump of trees, usually from bottom to top (syn. Candling). Spotting - A fire producing firebrands carried by surface winds, a fire whirl, and/or convection column that fall beyond the main fire perimeter and result in spot fires. Note: Solid Mass or Ember Transport under Heat Transfer. Crowning - A fire ascending into the crowns of trees and spreading from crown to crown. Note: Three classes of Crown Fire under Forest Fire (1).</p>
fire behaviour forecast	<p>S: prediccion del comportamiento del fuego G: Vorhersage des Feuerverhaltens F: prevision de comportement du feu</p>

	A prediction of probable fire behaviour in support of fire suppression or prescribed burning operations.
fire behaviour prediction model	<p>S: G: Modell zur Vorhersage des Feuerverhaltens F:</p> <p>A set of mathematical equations that can be used to predict certain aspects of fire behaviour when provided with an assessment of fuel and environmental conditions</p>
fire behaviour triangle	<p>S: G: [Dreiecksbeziehung des Feuerverhaltens] F:</p> <p>An instructional aid in which the sides of an equilateral triangle represent the three interacting components of the fire environment that are responsible for fire behaviour, i.e., fire weather, fuels, and topography (syn. Fire Environment Triangle; cf. Fire Triangle).</p>
fire belt	<p>S: cortafuego, faja auxiliar; cortafuego verde G: Brandschneise F: tranchee pare feu</p> <p>A strip, cleared or planted with trees, maintained as a firebreak or fuelbreak</p>
fire benefits	<p>S: beneficios del fuego G: [Positive Auswirkungen von Feuer] F: aspects benefiques du feu</p> <p>Any effect(s) of fire that are favourable or beneficial in terms of the attainment of forest management and other land use objectives.</p>
fire bombing	S:

	<p>G: Luftgestützte Feuerbekämpfung; Feuerlöschen aus der Luft F:</p> <p>An aerial attack operation involving the use of aircraft to drop suppressants or retardants to suppress or retard the spread of forest fires (cf. Water Bombing)</p>
fire boss	<p>S: director tecnico del incendio, jefe de incendio G: Einsatzleiter der Feuerbekämpfung F: chef de lutte, commandant au feu</p> <p>The person responsible for all fire suppression and service activities on a fire (cf. Fire Warden)</p>
fire cache	<p>S: almacen de incendios, deposito de herramientas y equipos G: Stützpunkt bzw. Bevorratungslager für Löschgeräte F: equipements de secours</p> <p>A supply of fire tools and equipment assembled in planned quantities or standard units at a strategic point for exclusive use in fire suppression</p>
fire camp	<p>S: campamento de incendios G: Basislager bei der Waldbrandbekämpfung F: camp principal, camp de base des pompiers</p> <p>A location equipped to provide service and support for firefighters and equipment being used to suppress a fire</p>
fire case histories	<p>S: G: Untersuchung zur Feuergeschichte F:</p> <p>An analytical and historical description of the development of a single fire event</p>
fire cause (fire cause class)	S: clase de causas

	<p>G: Ursache (Ursachengruppe) für die Entzündung eines Feuer F: classe de cause d'incendie</p> <p>cf. Causes of Fires</p>
fire characteristics chart	<p>S: G: Kartierung der Eigenschaften eines Feuerereignisses F:</p> <p>A graphical means by which to display four properties of wildland fires: rate of spread, heat per unit area, fireline intensity, and flame length</p>
fire climate	<p>S: clima en relacion con el fuego G: Waldbrand-Wetterlage F: facteur climatique d'incendie</p> <p>The composite or generally prevailing weather conditions of a region, as temperature, air pressure, humidity, precipitation, cloudiness, and winds, over time that affect fire behaviour</p>
fire climax	<p>S: climax del fuego, climax vegetacional por fuego G: Feuerklimax F: pyroclimax</p> <p>A plant community at a stage of succession maintained by periodic fires</p>
fire code	<p>S: G: Gesetzliche Vorschriften zur Nutzung und Bekämpfung von Feuer F:</p> <p>Legal regulations pertaining to fire practices</p>
fire complex	<p>S:</p>

	<p>G: Feuerkomplex F:</p> <p>A cluster of fires that is too complicated to manage as individual events and is therefore administered as a single macro-unit</p>
fire concentration	<p>S: (1) concentrazione di incendi, (2) densita di incendi G: (2) Feuerhäufigkeit pro Bezugsfläche F: (2) densite des Incendies, concentration des Incendies,</p> <p>(1) Generally, a situation in which numerous fires are burning in a locality; (2) more specifically, the number of fires per unit area or locality for a given period, generally a year</p>
Fire Control	<p>S: G: Ausschluss bzw. Bekämpfung von Feuer F:</p> <p>All activities concerned with protection of vegetation from fire (cf. Fire Exclusion, Fire Prevention, Fire Suppression)</p>
Fire Cooperator	<p>S: colaborador, combatiente calaborador G: [Zusammenarbeitende Dienststelle bzw. Unternehmer zur Wahrnehmung von Aufgaben im Feuer-Management] F: auxiliaire des services d'incendie</p> <p>A local person or agency, outside the fire management organization, who has agreed in advance to perform fire management services (e.g., prevention, detection, collection of fire weather data, suppression) and who has received prior training or instructions in giving such services.</p>
fire crew	<p>S: cuadrilla, brigada G: Löschtrupp F: equipe de pompiers</p>

	A general term for two or more firefighters organized to work as a unit (cf. Suppression Crew)
fire crew work formation	S: G: Aufbau einer Feuerbekämpfungseinheit F: Standard crew arrangement used for fireline construction in indirect attack; consists of line locator, line cutters, rakers, torch operators, and mopup crew (cf. Progressive Method of Line Construction)
fire cycle	S: rotacion de quemas G: Feuerzyklus F: cycle de feu The number of years required to burn over an area equal to the entire area of interest (cf. Fire Frequency, Fire Interval)
fire damage	S: perdidas por incendios G: Feuerschaden F: dommages d'incendies Any effects of fire that are detrimental or damaging in terms of the attainment of forest management and other land use objectives (Note: For fire damages in plants and animals use Fire Injury)
fire danger	S: peligro de Incendios G: Brandgefahr F: risque d'incendie A general term used to express an assessment of both fixed and variable factors of the fire environment that determine the ease of ignition, rate of spread, difficulty of control, and fire impact; often expressed as an index
fire danger class	S: G: Brand- oder Feuergefahrenklasse

	<p>F:</p> <p>A classification System of Fire Danger used in an index scale and identified by descriptive terms (e.g, Nil, Very Low, Low, Moderate, High, Very High, or Extreme), by numerical values (e.g., I, II, III, IV, or V), and/or by colour code (e.g., green, blue, yellow, orange, or red). The classification system may be based and depends on more than one fire danger index.</p>
Fire Danger Index	<p>S:</p> <p>G: Brandgefahren-Index</p> <p>F:</p> <p>A quantitative indicator of one or more facets of fire danger, expressed either in a relative sense or as an absolute measure; often used as a guide in a variety of fire management activities (e.g., to judge day-to-day preparedness and suppression requirements, as a basis for providing information on fire danger to the general public in fire prevention, as an aid to prescribed burning) (syn. Danger Index)</p>
Fire Danger Rating	<p>S: calculo del peligro de incendios, evaluacion del peligro de incendios</p> <p>G: Einstufung, Berechnung von Feuergefahr</p> <p>F: evaluation du risque d'incendie</p> <p>A component of a fire management system that integrates the effects of selected fire danger factors into one or more qualitative or numerical indices of current protection needs</p>
fire day	<p>S: fire day</p> <p>G: [Feuertag; 24 Stunden-Periode]</p> <p>F: jour dangereux</p> <p>Standard 24-hour period beginning at 10 a.m., during which most wildfires undergo a predictable speeding up and slowing down of intensity, depending primarily on the influence of weather and fuel factors</p>
fire death	<p>S:</p> <p>G: Brandopfer</p>

	<p>F:</p> <p>Fire casualty which is fatal or becomes fatal within one year of the fire</p>
fire-dependent species	<p>S:</p> <p>G: Feuerabhängige Art</p> <p>F:</p> <p>Plant and animal species which require regular fire influence which triggers or facilitates regeneration mechanisms, or regulates competition. Without fire influence these species would become extinct.</p>
fire detection	See Detection
fire devil	See Fire Whirl
fire discovery	See Discovery
fire district	<p>S: [distrito de incendios], distrito de proteccion</p> <p>G: Ausrückbereich, Zuständigkeitsbereich, Feuerdistrikt</p> <p>District De Protection Contre Les Incendies</p> <p>(1) [N.Am] A geographic subdivision of a state, province, territory or county which is under organized protection from forest fires. (2) [United Kingdom] An area covered by one jurisdiction for fire control purposes, as defined in working plans. Note: In Australia it generally has a precise, legal definition in each State. (3) [USA] A rural or suburban fire organization, usually tax supported, that maintains fire companies and apparatus. It is also called a fire protection district.</p>
fire duty	<p>S: trabajo de combate de incendios</p> <p>G: Löscheinsatz</p> <p>F: service d'incendie</p> <p>Actual physical engagement in firefighting service as distinguished from staff work at headquarters or maintenance</p>

	division; work at an individual fire done by an individual firefighter or by a company
fire ecology	S: G: Feuerökologie F: The study of the relationships and interactions between fire, living organisms, and the environment
fire edge	S: borde del incendio G: Feuerfront, Feuersaum F: lisiere d'un incendie Any part of the boundary of a fire at a given moment (Note: The entire boundary is termed the fire perimeter)
fire effects	S: efectos del fuego G: Auswirkungen des Feuers, Brandwirkungen F: effets des incendies Physical, biological, and ecological impacts of fire on the environment
fire environment	S: [ambiente del fuego] G: Feuerumwelt [Umweltbedingungen, die das Verhalten des Feuers Bestimmen] F: environnement du feu The complex of surrounding conditions, influences, and modifying forces of topography, fuel, and weather that determine fire behaviour and impacts
fire environment triangle	S: G: Feuer-Umwelt- Dreieck F: A graphical representation, modelled on the fire triangle, to show the importance of fuel,. Weather, and topography

	on fire behaviour (cf. Fire Triangle, Fire Behaviour Triangle, Fire Triangle)
fire exclusion	S: G: Feuerausschluss F: Planned (systematic) protection of an ecosystem from any wildfire, including any prescribed fire, by all means of fire prevention and suppression in order to obtain management objectives (cf. Fire Control)
Fire Family Program	S: G: [Eigenname eines Computerprogrammes] F: A computer programme that uses historical weather data for fire planning.
fire fighting	See: Fire Suppression
fire finder map	S: G: Karte auf Feuerpeilgerät F: A map situated on a fire finder and used to establish the location of fires from a lookout (cf. Alidade, Bearing, Osborne Fire Finder; Fire Plotting Map)
fire flap	Syn. Fire Swatter
fire foam	See: Foam
fire free interval	See: Fire Interval
fire frequency	S: frecuencia de incendios G: Waldbrandhäufigkeit

	<p>F: frecuencia de incendios</p> <p>The average number of fires or regularly occurring fire events per unit time in a designated area. (cf. Fire Cycle, Fire Interval)</p>
fire front	<p>S: G: Feuerfront F:</p> <p>The part of a fire within which continuous flaming combustion is taking place. Unless otherwise specified, the fire front is assumed to be the leading edge of the fire perimeter. In ground fires, the fire front may be mainly smouldering combustion.</p>
fire fundamentals triangle	<p>S: G: Feuerdreieck F:</p> <p>A graphical representation of the basic components of combustion: fuel, heat, and oxygen (syn. Fire Triangle)</p>
fire growth	<p>S: G: Ausbreitung des Feuers, Feuerausbreitung F:</p> <p>(1) The evolution of a fire from ignition to self-sustaining propagation, and perhaps to other stages of development; (2) the growth of a fire's perimeter</p>
fire guard	<p>S: (1) vigilante de incendios, (2) cortafuego G: (1) Feuerwache; (2) Feuerbarriere F: (1) pompier forestier, pompier patrouilleur, (2) barriere anti-feu</p> <p>(1) A general term for a firefighter, lookout, patrol, prevention guard, or other person directly employed for</p>

	prevention and/or detection and suppression of fires (cf. Fire Warden); (2) [Canada] An artificial barrier constructed for the purpose of protecting a high-value area from fires and to provide a control line from which to carry out fire suppression. (cf. Firebreak, Fire Warden)
fire hazard	<p>S: (1) peligrosidad del combustible, (2) inflamabilidad G: (1) Feuergefährlichkeit, (2) Feuergefährdung F: (1) risque d'incendie</p> <p>(1) A fuel complex, defined by volume, type, condition, arrangement, and location, that determines the degree both of ease of ignition and of fire suppression difficulty; (2) a measure of that part of the fire danger contributed by the fuels available for burning. Note: Is worked out from their relative amount, type, and condition, particularly their moisture contents (syn. Hazard)</p>
fire hazard index	<p>S: indice de inflamabilidad, indice de peligrosidad del combustible g: Index Der Feuergefährdung F: INDICE DE RISQUE DE FEU</p> <p>A numerical rating for specific fuel types, indicating the relative probability of fires starting and spreading, and the probable degree of resistance to control; similar to burning index, but without effects of wind speed</p>
fire hazardous area	<p>S: zona de peligro G: Feuergefährdetes Gebiet F: zone sensible aux incendies</p> <p>Those wildland areas where the combination of vegetation, topography, weather, and the threat of fire to life and property create difficult and dangerous problems</p>
fire history	<p>S: G: Feuergeschichte F:</p> <p>The reconstruction and interpretation of the chronological record, causes and impacts of fire occurrence in an</p>

	ecosystem in relation to changes of past environmental, cultural and socio-economic conditions. Fire history evidence is based on analysis of charcoal deposits in soils, sediments, and ice, dendrochronology (fire scar analysis), historical documents, and fire reports.
fire impact	<p>S: G: Impakt von Feuer F:</p> <p>The effect of fire on the ecosystem in terms of biophysical alterations (e.g., crown scorch, mineral soil exposure, depth of burn, fuel consumption)</p>
fire incidence	<p>S: G: Feuervorkommen, Feuerhäufigkeit F:</p> <p>The average number of fires in a specified area during a specified time period</p>
fire information system	<p>S: G: Feuer-Informationssystem F:</p> <p>An information system designed to support fire management decisions. Advanced fire information systems integrate different sources of information required (e.g., vegetation conditions including fire history, topography, fire weather, fire behaviour models, real-or near-real time fire detection and monitoring data, fire management resources, infrastructures and pre-suppression information) on the base of a Geographic Information System (GIS) and allows real-time distribution or access via telecommunication.</p>
fire injury	<p>S: danos personales por incendio, accidente por incendio G: Feuerschaden F: brulure</p> <p>(1) A fire injury is a person suffered as the result of a fire that requires (or should require) treatment by a</p>

	practitioner of medicine; (2) Also used to describe fire-damaged plants, e.g. fire scar, fire wound, or scorch.
fire intelligence	<p>S: G: Datenerhebung bzw. Aufklärung von Feuerinformation F:</p> <p>All infrastructures, communication, base data and other hard- and software that provide the inputs to an information and decision-support system in fire management</p>
fire intensity	<p>S: G: Feuerintensität F:</p> <p>A general term relating to the heat energy released in a fire. (More specific term: cf. Fireline Intensity)</p>
fire interval	<p>S: periodo sin incendios G: Feuerintervall F: periodicite des incendies</p> <p>The number of years between two successive fires documented in a designated area (i.e., the interval between two successive fire occurrences); the size of the area must be clearly specified (cf. Fire Cycle, Fire Frequency, Fire Free Interval, Return Period)</p>
fire investigation	<p>S: investigacion de causas G: Untersuchung der Brandursache F: enquete sur la cause du feu</p> <p>A procedure undertaken to determine as a minimum, when, where, and how a fire started.</p>
fire lane	<p>S: pista G: Zufahrtsweg für Feuerwehrfahrzeuge F: chemin de defense contre l'incendie</p>

	Cleared path wide enough to permit single-lane vehicular access in a remote area
fire load	<p>S: peso de la clase de peligro, carga de incendio G: Feuerbelastung F: ponderation du risque d'incendie</p> <p>The number and size of fires historically experienced on a given unit over a given period (usually one day) at a given index of fire danger</p>
fire lookout	See: Lookout
fire management	<p>S: proteccion contra incendios, gestion ordenada del fuego, manejo del fuego G: Feuer-Management F: aménagement de protection contre les incendies</p> <p>All activities required for the protection of fire prone forest and other vegetation values from fire and the use of fire to meet land management goals and objectives. It involves the strategic integration of such factors as a knowledge of fire regimes, probable fire effects, values-at-risk, level of forest protection required, cost of fire-related activities, and prescribed fire technology into multiple-use planning, decision making, and day-to-day activities to accomplish stated resource management objectives. Successful fire management depends on effective fire prevention, detection, and suppression, having an adequate fire suppression capability, and consideration of fire ecology relationships</p>
fire management plan	<p>S: plan de control de incendios, plan de manejo del fuego G: Feuer-Management-Plan F: plan de defense c0ntre l'incendie</p> <p>(1) A statement, for a specific area, of fire policy and prescribed action; (2) The systematic, technological, and administrative management process of determining the organization, facilities, resources, and procedures required to protect people, property, and forest areas from fire and to use fire to accomplish forest management and other land use objectives (cf. fire suppression plan, preattack plan, pre-suppression planning)</p>

fire management unit	<p>S: G: [Kleinste Flächeneinheit für die Feuer-Management-Planung] F:</p> <p>The smallest geographic entity used in prescribed fire planning, other than an individual burn block</p>
fire management zone	<p>S: G: Planungszone für das Feuer-Management F:</p> <p>A geographic unit used in prescribed fire planning; intermediary between a fire management unit (smaller) and a park, forest, district, etc. (larger)</p>
Fire Model	<p>S: modelo de incendio G: Feuerausbreitungsmodell, Waldbrandmodell F: simulateur de feu</p> <p>A computer model which, with given information, will predict the spread of fire as influenced by meteorological conditions, fuel characteristics, and topography</p>
fire occurrence	<p>S: incendio ocurrido G: Auftreten von Waldbränden F: probabilité de feu</p> <p>The number of fires started in a given area over a given period of time</p>
fire occurrence map	<p>S: mapa de incendios ocurridos G: Waldbrandkartierung F: (1) carte des foyers d'incendie, (2) carte des incendies</p> <p>A map that shows by symbols the starting points of all fires for a given period</p>

Fire Pack	<p>S: equipo personal contra incendios, equipo de combate personal G: Ausrüstung für Feuereinsatz (Einsatzpaket) F: paquetage incendie</p> <p>A one-person unit of fire tools, equipment, and supplies prepared in advance for carrying on the back</p>
fire perimeter	<p>S: G: Feuerumfang F:</p> <p>The entire outer edge or boundary of a fire</p>
fire planning	<p>S: planificación de la defensa, plan de protección G: Vorbeugende Waldbrandplanung F: planification de la protection contre le feu</p> <p>The systematic technological and administrative management process of designing organization, facilities, and procedure to protect wildland from fire</p>
fire plot	<p>S: G: Versuchsfläche F:</p> <p>Experimental (scientific) fire observation or monitoring area</p>
fire plotting map	<p>S: mapa de situación de incendios, mapa de localización de incendios G: Karte zur Lokalisierung eines Feuers F: carte de relevé des incendies</p> <p>A map used for determining the location of fires, commonly provided with an azimuth circle to facilitate location by cross bearings.</p>

fire plough	<p>S: arado G: Pflug, Scheibenpflug F: charrue</p> <p>A heavy duty plough of either the share or disc type, designed solely for constructing fireguards or fuelbreaks</p>
fire potential	<p>S: G: Feuerpotential F:</p> <p>Capable of being or becoming: a potential fire danger</p>
fire presuppression	<p>S: preparacion de la extincion, presupresion G: [Vorbeugender Brandschutz zur Unterstützung der Feuerbekämpfung] F: preparation de la defense contre les incendies (prevention)</p> <p>Activities undertaken in advance of fire occurrence to help ensure more effective fire suppression; includes overall planning, recruitment and training of fire personnel, procurement and maintenance of fire fighting equipment and supplies, fuel treatment, and creating, maintaining, and improving a system of fuelbreaks, roads, water sources, and control lines</p>
fire prevention	<p>S: prevencion de incendios G: Feuerverhütung F: prevention generale contre les incendies</p> <p>All measures in fire management, fuel management, forest management, forest utilisation and concerning the land users and the general public, including law enforcement, that may result in the prevention of outbreak of fires or the reduction of fire severity and spread (syn. Prevention, cf. Fire Control)</p>
fire progress map	<p>S: mapa de avance del incendio G: [Karte der gegenwärtigen Waldbrandsituation]</p>

	<p>F: carte de marche d'un incendie, carte de developpement d'un incendie</p> <p>Map maintained on a large fire to show at specified times the location of the fire perimeter, deployment of suppression forces, and progress of suppression</p>
fire protection	<p>S: proteccion contra incendios G: Brandschutz, Feuerschutz, Abwehrender Brandschutz F: protection anti-incendie</p> <p>The actions taken to limit the adverse environmental, social, political, and economical effects of wildland fire</p>
fire pump	<p>S: motobomba portatil G: Pumpe, Tragkraftspritze F: pompe a incendie, motopompe</p> <p>An engine-driven pump, usually gasoline powered, specifically designed for use in fire suppression, which may be either carried by a person or transported on skids or a trailer</p>
fire rake	<p>S: G: Feuerrechen F:</p> <p>Long-handled combination rake and cutting tool, the blade of which is constructed of a single row of three or four sharpened teeth (syn. Rake)</p>
fire regime	<p>S: G: Feuerregime F:</p> <p>The patterns of fire occurrence, size, and severity - and sometimes, vegetation and fire effects as well - in a given area or ecosystem. It integrates various fire characteristics. A natural fire regime is the total pattern of fires over time that is characteristic of a natural region or ecosystem. The classification of fire regimes includes variations in</p>

	ignition, fire intensity and behaviour, typical fire size, fire return intervals, and ecological effects.
fire resistant plant	S: especie resistente al fuego G: Feuerresistente Pflanze F: arbre resistant au feu Species with morphological or seasonal growth characteristics that give it a low probability of being injured or killed by fire, e.g. by the heat-insulating effect of bark or seasonal dormancy
fire retardant	S: retardante G: Brandhemmender Löschmittelzusatz F: retardant Any substance except plain water that by chemical or physical action reduces the flammability of fuels or slows their rate of combustion, e.g., a liquid or slurry applied aeriallyaerial or from the ground during a fire suppression operation (syn. Retardant; cf. Poise)
fire risk	See: Risk
fire run	S: G: [Schnelles Ausbrechen der Feuerfront] F: Rapid advance of a fire characterized by a marked increase in rate of spread and a corresponding increase in frontal fire intensity with respect to that noted before and following the event
fire scar	S: (1) herida, (2) cicatriz por fuego G: (1) Brandwunde; (2) Brandfläche (Fernerkundung) F: cicatrice d'incendie, blessures d'incenpies, marques d'incenpies (1) Mark left on the surface (bark) of woody vegetation after the healing of a fire injury (cf. Fire Wound); (2) mark left on vegetation or on a landscape by fire as depicted from the air or from space (remote sensing)

fire scar analysis	<p>S: ANALISIS DE HERIDA (CICATRLCES) POR EL FUEGO G: [Analyse von Brandwunden zur Rekonstruktion der Feuergeschichte] F: analyse des cicatrices</p> <p>Analysis of fire scars to determine the occurrence of past (historic) fire events (fire frequency, fire-return intervals) of individual trees or for specified areas</p>
fire season	<p>S: epoca de peligro, temporada de incendios G: Feuersaison F: saison d'incendie</p> <p>(1) Period(s) of the year during which wildland fires are likely to occur and affect resources values sufficient to warrant organized fire management activities; (2) a legally enacted time during which burning activities are regulated by State or local authority.</p>
fire sensitive species	<p>S: G: Feuerempfindliche Art F:</p> <p>A species that has a greater probability of being killed or scarred by fire, e.g. a tree with thin bark or highly flammable foliage, or an animal species which cannot evade the lethal temperatures of a wildland fire</p>
fire service	<p>S: servicio de incendios, organizacion de proteccion contra incendios G: Feuerwehr F: service d'incendie</p> <p>The organized fire protection service; its members, individually and collectively; allied organizations assisting protection agencies</p>
fire severity	<p>S: G: [Grad bzw. Stärke der Auswirkung eines Feuers]</p>

	<p>F:</p> <p>Degree to which a site has been altered or disrupted by fire; loosely, a product of fire intensity and residence time (cf. Fire Intensity)</p>
fire shelter	<p>S:</p> <p>G: Feuerschutzzelt</p> <p>F:</p> <p>An aluminized tent offering protection by means of reflecting radiant heat and providing a volume of breathable air in a fire entrapment situation. Fire shelters should only be used in life threatening situations, as a last resort</p>
fire shovel	<p>S: pala</p> <p>G: Feuerschaufel</p> <p>F: pelle a feu</p> <p>A type of shovel specifically designed for use in constructing a fireline. It has a tapered blade with both edges sharpened; used for scraping, digging, grubbing, and cutting.</p>
fire simulator	<p>S: simulador de incendios</p> <p>G: Feuersimulator, Waldbrandsimulator</p> <p>F: simulateur d'incendie</p> <p>A training device (generally an integrated set of several types of projectors and a large screen) that imposes simulated fire, smoke, etc. on a projected landscape scene, for the purpose of instructing fire control personnel in different fire situations and fire suppression techniques</p>
fire spread	See: Rate of Spread
fire spread model	<p>S:</p> <p>G: Feuerausbreitungsmodell</p> <p>F:</p>

	Set of mathematical equations used to predict the advance of a fire front for a given fuelbed and topographical and meteorological conditions
fire storm	<p>S: nube convectiva de fuego, tormenta de fuego G: Feuersturm F: incendie tornade</p> <p>Violent convection caused by a large continuous area of intense fire, often characterized by destructively violent, surface indrafts, a towering convection column, long-distance spotting, and sometimes by tornado-like vortices (cf. Extreme Fire BahaviorBehaviour)</p>
fire suppressant	<p>S: G: Mittel zur Waldbrandbekämpfung F:</p> <p>Any agent used to extinguish the flaming and glowing phases of combustion by direct application to the burning fuel</p>
fire suppression	<p>S: extincion de incendios, supresion de incendios G: Feuerbekämpfung F: extinction</p> <p>All activities concerned with controlling and extinguishing a fire following its detection. (Syn. Fire Control, Fire Fighting).</p> <p>Methods of suppression are:</p> <p>Direct Attack - A method whereby the fire is attacked immediately adjacent to the burning fuel.</p> <p>Parallel Attack - A method whereby a fireguard is constructed as close to the fire as heat and flame permit, and burning out the fuel between the fire and the fireguard.</p> <p>Indirect Attack - A method whereby the control line is strategically located to take advantage of favourable terrain and natural breaks in advance of the fire perimeter and the intervening strip is usually burned out or backfired.</p> <p>Hot Spotting - A method to check the spread and intensity of a fire at those points that exhibit the most rapid spread</p>

	<p>or that otherwise pose some special threat to control the situation. This is in contrast to systematically working all parts of the fire at the same time, or progressively, in a step-by-step manner.</p> <p>Cold Trailing - A method of determining whether or not a fire is still burning, involving careful inspection and feeling with the hand, or by use of a hand-held infrared scanner, to detect any heat source.</p> <p>Mopup - The act of extinguishing a fire after it has been brought under control.</p>
fire suppression organization	<p>S: organizacion de extincion, organizacion de control de incendios forestales G: Organisation der Feuerbekämpfung F: organisation de l'extinction</p> <p>(1) The personnel collectively assigned to the suppression of a specific fire or group of fires; (2) the personnel responsible for fire suppression within a specified area; (3) the management structure, usually shown in the form of an organization chart of the persons and groups having specific responsibilities in fire suppression.</p>
fire suppression plan	<p>S: G: Feuerbekämpfungsplan F:</p> <p>A document containing the essential elements of actions necessary to save human life and property, and minimize fire damage(s). May apply to an overall fire suppression program for a broad area but most often it is for site-specific situations (cf. Fire Management Plan, Preattack Plan)</p>
fire swatter	<p>S: batefuego, batidor, matafuego G: Feuerpatsche F: batte a feu</p> <p>A fire suppression tool, sometimes improvised, used in direct attack for beating out flames along a fire edge or from a light fire. It may consist merely of a bunch of twigs or wet sacking, or be a manufactured tool, e.g., a flap of belting fabric, rubber, or sheet metal fastened to a long handle (syn. Fire Flap, Fire Beater, Flapper).</p>
fire tool cache	<p>S: almacen de incendios, deposito de herramientas y equipos G: Löschgerätestützpunkt</p>

	<p>F: depot d'outillage contre le feu</p> <p>Supply of fire tools and equipment assembled in planned quantities and/or standard units at a strategic point, for exclusive use in fire suppression</p>
fire tower	See: Lookout Tower
fire trace	<p>S: linea de defensa, linea de fuego</p> <p>G: Basislinie (für Gegenfeuer bzw. kontrolliertes Brennen)</p> <p>F: ligne p'appui</p> <p>A temporary, cleared (often burned), narrow strip from which to counterfire or do prescribed burning</p>
fire trap	<p>S: acumulacion de combustible</p> <p>G: Extreme Gefahrenlage</p> <p>F: traquenard, zone piege tres riche en combustibles, zone a risque eleve</p> <p>(1) An accumulation of highly combustible material, rendering firefighting dangerous; (2) any situation in which it is highly dangerous to fight fire</p>
fire trench	See: Trench
fire triangle	<p>S: triangulo del fuego</p> <p>G: Feuerdreieck</p> <p>F: triangle du feu</p> <p>Instructional aid in which the sides of a triangle are used to represent the three factors (oxygen, heat, fuel) necessary for combustion and flame production; removal of any of the three factors causes flame production to cease (cf. Fire Behaviour Triangle, Fire Environment Triangle, Fire Fundamentals Triangle)</p>
fire truck	See Ground Tanker

fire warden	<p>S: responsable de incendios, encargado de proteccion G: Waldbrandbeauftragter F: directeur de la defense, garde-feu</p> <p>Officer in charge of fire protection in a specific area (cf. Fire Boss, Fire Guard)</p>
fire weather	<p>S: condiciones meteorologicas que influyen en el fuego G: Feuerwetter, Waldbrandwetterlage F: jour a risque</p> <p>Weather conditions which influence fire ignition, behaviour, and suppression. Weather parameters are dry-bulb temperature, relative humidity, wind speed and direction, precipitation, atmospheric stability, winds aloft.</p>
fire weather forecast	<p>S: prediccion meteorologica, pronostico meteorologico G: Feuer- /Waldbrandwettervorhersage F: prevision meteo-incendie</p> <p>A prediction of the future state of the atmosphere prepared specifically to meet the needs of fire management in fire suppression and prescribed burning operations. Two types of forecasts are most common: The zone or area weather forecast is issued on a regular basis during the fire season for a particular geographical region and/or one or more fire weather stations. These regions are delineated on the basis of fire climate and/or administrative considerations. A spot weather forecast is issued to fit the time, topography, and weather of a specific campaign fire location or prescribed fire site. These forecasts are issued on request and are more detailed, timely, and specific than zone or area weather forecasts</p>
Fire Weather Index (FWI)	<p>S: indice meteorologico de peligro G: Feuer- /Waldbrandwetterindex F: indice meteorologique des incendies</p> <p>See under Canadian Forest Fire Weather Index Table</p>
fire weather station	<p>S: G: Feuerwetterstation</p>

	<p>F:</p> <p>A meteorological station equipped to measure fire weather elements. A primary weather station is one at which sufficient weather observations are taken to compute fire danger indexes. A secondary weather station does not provide this level of information, but rather provides supplementary data on weather conditions</p>
fire whirl	<p>S: torbellino de fuego G: Feuerwirbel F: tourbillon de feu</p> <p>Spinning vortex column of ascending hot air and gases rising from a fire and carrying aloft smoke, debris, and flame. Fire whirls range from less than one metre to several hundred metres in diameter. Large fire whirls have the intensity of a small tornado (syn. Fire Devil, Whirlwind).</p>
fire wound	<p>S: G: Feuerwunde F:</p> <p>An injury caused by fire left on the surface of living tissue (cf. Fire Scar)</p>
fire year	<p>S: G: Feuerjahr F:</p> <p>A year when severe drought, combined with other factors such as high winds, contribute to a large number of wildfires</p>
firebrand	<p>S: pavesas, materia en combustlon G: Brennendes Material (z.B. glühende Partikel, Flugfeuer) f: brandon flammeche, tison</p> <p>Flaming or glowing fuel particles that can be carried naturally by wind, convection currents, or by gravity into</p>

	unburned fuels
firebreak	<p>S: cortafuegos, cortafuego G: Brandschutzstreifen, Feuerschutzstreifen, Wundstreifen F: pare-feu</p> <p>Any natural or constructed discontinuity in a fuelbed utilised to segregate, stop, and control the spread of fire or to provide a control line from which to suppress a fire; characterized by complete lack of combustibles down to mineral soil (as distinguished from fuelbreak). (cf. Control Line)</p>
firebreak	<p>S: G: Feuerschneise, Feuerschutzstreifen F:</p> <p>Any natural or constructed discontinuity in a fuelbed utilized to segregate stop, and control the spread of fire or to provide a control line from which to suppress a fire (cf. Fire Guard)</p>
firecast	<p>S: [modelos de prediccion] G: [Feuerausbreitungsmodell] F: modele de prediction d'incendie</p> <p>Set of computerised firemodels run during fire season at the operations coordination centre on preselected locations to indicate possible fire spread from those points for that date (ICS)</p>
fire-dependent ecosystem	<p>S: G: Feuerabhängiges Ökosystem F:</p> <p>An ecosystem which requires periodic fire to maintain the character, diversity and vigour of its intrinsic plant and animal communities</p>
firefighter	S: bombero, combatiente

	<p>G: Feuerwehrmann F: pompier</p> <p>Person whose principal function is fire suppression</p>
firefinder	<p>S: alidada G: Peilscheibe F: alidade, detecteur d'incendie, instrument a reperer un incendie</p> <p>A device or instrument used by lookouts to determine the horizontal bearing and sometimes the vertical angle of a fire from a lookout</p>
fireline	<p>S: linea de defensa, linea de fuego G: Schutzstreifen, Bekämpfungslinie, Sicherungslinie, Feuerlinie F: ligne d'arret, ligne de mise a feu tactique</p> <p>(1) A loose term for any cleared strip used in control of a fire; generally that portion of a control line from which flammable materials have been removed by scraping or digging down to the mineral soil; (2) a cleared, permanent firebreak. (cf. Control Line)</p>
fireline explosives	<p>S: G: Sprengstoff (für das Anlegen einer Feuerbekämpfungslinie) F:</p> <p>Specially developed coils containing explosives that are detonated to create a fireline through ground fuels</p>
fireline intensity	<p>S: intensidad lineal del fuego, intensidad calorica G: Abbrandrate, Feuerintensität F: intensite du feu</p> <p>The rate of heat release per unit time per unit length of fire front. Numerically, the product of the heat of combustion, quantity of fuel consumed per unit area in the fire front, and the rate of spread of a fire, expressed in</p>

	kW/m (syn. Byram´s Intensity, Fire Intensity)
fire-return interval	<p>S: G: Abstand zwischen dem Wiederauftreten von Feuer F:</p> <p>The number of years between two successive fires documented in a designated area (i.e., the interval between two successive fire occurrences); the size of the area must be clearly specified.</p>
fire-sensitive species	<p>S: especie no resistente al fuego, especie sensible al fuego G: Feuerempfindliche Art F: ????? sensible au feu</p> <p>A species with thin bark or highly flammable foliage that has a relatively greater probability of being killed or scarred by a fire</p>
fire suppression	<p>S: extincion de incendios G: Waldbrandbekaemfung F supresion de incendios</p> <p>All the work and activities connected with fire-extinguishing operations, beginning with discovery and continuing until the fire is completely extinguished</p>
firing technique	<p>S: tecnica de ignicion, tecnica de encendido G: Brenntechnik F: technique du feu tactique</p> <p>Any method of igniting a wildland area to consume the fuel in a prescribed pattern; e.g., heading or backing fire, spot fire, strip-head fire, and ring fire</p>
firing/firing out	<p>S: prender fuego, encendido G: Gegen- bzw. Vorfeuer anlegen F: feu tactique</p>

	The intentional setting of fires to fuels between the control line and the main front of fire, either as backfiring or burning out operation
fix	S: fijo, ubicacion geografica G: Position, Standort F: point [Aviation] A geographical position determined by visual reference to the surface, by reference to one or more radio navigational aids, by celestial plotting, or by any other navigational device
fixed-point detection	S: detection desde puestos (puntos) fijos G: Feuer- / Waldbrandentdeckung (stationär) F: localisation a partir de points fixes Detection of fires from lookout towers or other semi-permanent locations as distinguished from mobile ground patrols or aerial detection
flame	S: llama G: Flamme F: flamme A rapidly reacting body of gas, commonly a mixture of air and a combustible gas, generally accompanied by the evolution of sensible heat and incandescence
flame angle	S: G: Flammen-Winkel F: Angle between the flame at the leading edge of the fire front and the ground surface, expressed in degrees
flame depth	S:

	<p>G: Tiefe einer Flamme bzw. Feuerfront F:</p> <p>The depth of the fire front</p>
flame height	<p>S: G: Flammenhöhe F:</p> <p>The average maximum vertical extension of flames at the leading edge of the fire front. Occasional flashes that rise above the general level of flames are not considered. This distance is less than the flame length if flames are tilted due to wind or slope</p>
flame length	<p>S: longitud de llama, largo de llama G: Flammenlänge F: longueur de flamme</p> <p>The distance between the flame tip and the midpoint of the flame depth at the base of the flame (generally the ground surface), an indicator of fire intensity (cf. Frontal Fire Intensity)</p>
flame thrower	<p>S: lanzallamas G: Flammenwerfer F: lance flammes</p> <p>Device for throwing a stream of flaming liquid, used to facilitate rapid ignition during burn out operations on a wildfire or during a prescribed fire operation (cf. Burning Torch, Terra Torch)</p>
flaming combustion	<p>S: G: Verbrennung mit Flammenscheinung F:</p> <p>Luminous oxidation of gases evolved from the rapid decomposition of fuel. The flaming phase follows the pre-</p>

	<p>ignition phase and precedes the smouldering combustion phase, which has a much slower combustion rate. Water vapour, soot, and tar comprise the visible smoke. Relatively efficient combustion produces minimal soot and tar and white smoke; high moisture content also produces white smoke</p>
flaming front	<p>S: frente de llamas G: Flammfront F: front de flammes</p> <p>That zone of a moving fire where the combustion is primarily flaming. Behind this flaming zone combustion is primarily glowing. Light fuels typically have a shallow flaming front, whereas heavy fuels have a deeper front</p>
flammability	<p>S: inflamabilidad G: Entflammbarkeit F: inflammabilite</p> <p>Relative ease of igniting and burning of a given fuel under controlled conditions, with or without a pilot flame. Flammability of a fuel is characterised quantitatively by the ignition delay of a sample of fuel exposed to a normalised radiation source</p>
flank fire	<p>S: contrafuego de flanco, encendido de los flancos G: Flankenfeuer F: feu de flanc (feu de flanquement)</p> <p>A fire spreading, or set to spread, parallel (at roughly right angle) to the prevailing wind direction or to slope (cf. Backfire, Head Fire)</p>
flank fire ignition	See under Ignition Pattern
flanking fire suppression	<p>S: ataque por el flanco, ataque por los flancos G: Flankenangriff F: extinction par les flancs</p> <p>Attacking a fire by working along the flanks either simultaneously or successively from a less active or anchor point</p>

	and endeavouring to connect the two lines at the head
flanks	See under Forest Fire
flanks of a fire	S: flancos G: Feuerflanken F: flancs d'un feu The parts of the perimeter of a fire that are roughly parallel to the main direction of spread
flapper	See: Fire Swatter
flare up	S: llamarada G: Aufflammen F: flambee soudaine Any sudden acceleration in rate of spread or intensification of the fire. Unlike blow-up, a flare-up is of relatively short duration and does not radically change existing control plans (cf. Blow-up, Run of a Fire).
flash fuel	S: combustible ligero G: [Schnell entzündliches und abbrennbares Material] F: combustibles legers Fuels, e.g. grass, ferns, leaves, draped (i.e., intercepted when falling) needles, tree moss, and light slash, that ignite readily and are consumed rapidly by fire when dry; generally characterized by a comparatively high surface-to-volume ratio (cf. Fine Fuel).
flashover	S: inflamacion de gases G: Feuersprung F: explosion avec flammes, flamme eclair (1) Rapid combustion and/or explosion of trapped, unburned gases; usually occurs in poorly ventilated areas. The

	<p>flashover phenomenon is normally associated with structural or urban fires. However, it can occur in forest fires (although rare) when gases are trapped in topographic pockets or accumulate over a broad area when there is a temporary lull in air movement. (2) Stage of a fire at which all surfaces and objects within a space have been heated to their ignition temperature, and flame breaks out almost at once over the surface of all objects within the space.</p>
flight visibility	<p>S: visibilidad en (de) vuelo G: Flugsicht F: visibilite en vol</p> <p>The greatest distance which is possible to see during a flight under given atmospheric conditions. This visibility can be hindered by clouds, smoke and haze, especially in areas where fires are taking place.</p>
floatable pump	<p>S: G: Schwimmpumpe F:</p> <p>Small portable pump that floats in the water source</p>
flow conditioner	<p>S: fluidificador G: Mittel zur Erhaltung der Rieselfähigkeit F: adjuvant, poudre stabilisatrice, fluidifiant</p> <p>Chemical powders that will, in very small quantities, impart free-flowing qualities to other powders and tend to prevent them from caking and flocculating; used with fire retardant chemicals</p>
fluid foam	<p>S: G: Schaum in flüssiger Phase F:</p> <p>A low expansion foam type with some bubble structure and moderate drain time, exhibiting properties of both wet and dry foam types, which is used for extinguishment, protection, and mopup</p>

fly ash	<p>S: cenizas lanzadas al aire, pavesa G: Flugasche F: cendre volante</p> <p>Particulate matter emitted by a fire and larger than 10 microns in diameter with a consequently short residence time in the atmosphere</p>
foam	<p>S: espuma G: Schaum, Schaumlöschmittel F: mousse extinctrice</p> <p>The aerated solution created by forcing air into, or entraining air in water containing a foam concentrate by means of suitably designed equipment or by cascading it through the air at a high velocity. Foam reduces combustion by cooling, moistening and excluding oxygen (syn. Fire Foam)</p>
foam blanket	<p>S: G: Schaumteppich F:</p> <p>A layer of foam which forms an insulating and reflective barrier to heat and is used for fuel protection, suppression, and mopup</p>
foam concentrate	<p>S: G: Schaumlöschmittel-Konzentrat F:</p> <p>The concentrated foaming agent as received from the manufacturer which, when added to water, creates a foam solution</p>
foam line	<p>S: G: Schaumstreifen F:</p>

	A body of foam placed along areas to be protected from fire; also used as an anchor for indirect attack in place of hand-made fire trail
foam solution	S: G: Schaumlösung F: A low expansion foam type with no expansion, therefore lacking bubble structure, which is used for mopup and flame knockdown
foam system	S: G: Schaumsystem F: The apparatus and techniques used to mix concentrate with water to make solution, pump and mix air and solution to make foam, and transport and apply foam
foaming agent	S: G: Schaummittel F: An additive that reduces the surface tension of water (producing wet water) causing it to spread and penetrate more effectively and which produces foam through mechanical means
Foehn wind	S: G: Föhn F: A warm, dry and strong general wind that flows down into the valleys when stable, high pressure air is forced across and then down the lee slopes of a mountain range. The descending air is warmed and dried due to adiabatic compression producing critical fire weather conditions.

fog	<p>S: (1), (2) niebla G: (1) Nebelstrahl, (2) Nebel F: brouillard</p> <p>(1) [Firefighting] A jet of fine water spray discharged by spray nozzles, used to extinguish fires. (2) [Meteorology] Suspension of small water droplets near ground level, extend vertically to at least 6 m and reduces horizontal visibility to less than 1,000 m.</p>
folding tank	<p>S: deposito plegable G: Gummikissentank F: reservoir souple</p> <p>A portable, collapsible water tank with a tubular frame</p>
follow-up	<p>S: refuerzo G: Verstärkung F: renfort</p> <p>Action of augmenting initial attack by sending additional resources to facilitate fire suppression (syn. Reinforced Response)</p>
footprint	See: Aircraft Footprint
forecast area	<p>S: zona de validez de la prediccion (pronostico) G: Vorhersagegebiet (Feuerwetter) F: zone de prevision</p> <p>The geographical area for which a fire weather forecast is specified</p>
forest	See under Forest Fire
forest fire	S: incendio boschivo, incendio forestale

G: Waldbrand
F: feu de forêt

I. Definition of forest fire

Any wildfire or prescribed fire that is burning in a forest, variously defined for legal purposes. The FAO Forest Resource Assessment 2000 aims towards global standardisation of the terminology:

Forest: Land with tree crown cover of more than 10 percent and area of more than 0.5 hectares. The trees should be able to reach a minimum height of 5 meters at maturity. Other wooded land: Land either with a crown cover of 5-10 percent of trees able to reach a height of 5 meters at maturity; or a crown cover of more than 10 percent of trees not able to reach a height of 5 meters at maturity; or with shrub or bush cover of more than 10 percent. Other land: Land with less crown cover, tree height, or shrub cover as defined under "Other wooded land". Indication is desired if recurring wildfires affect "Other land" by inhibiting regeneration to the "Forest" and "Other wooded land" categories.

II. Typology

Ground Fire: A fire that burns in the ground fuel layer (syn. Subsurface Fire)

Surface Fire: A fire that burns in the surface fuel layer, excluding the crowns of the trees, as either a head fire, flank fire, or backfire.

Crown Fire: A fire that advances through the crown fuel layer, usually in conjunction with the surface fire. Crown fires can be classified according to the degree of dependence on the surface fire phase:

Intermittent Crown Fire: A fire in which trees discontinuously torch, but rate of spread is controlled by the surface fire phase (syn. Passive Crown Fire)

Active Crown Fire: A fire that advances with a well-defined wall of flame extending from the ground surface to above the crown fuel layer. Probably most crown fires are of this class. Development of an active crown fire requires a substantial surface fire, and thereafter the surface and crown phases spread as a linked unit (syn.

Dependent Crown Fire)

Independent Crown Fire: A fire that advances in the crown fuel layer only (syn. Running Crown Fire)

III. Anatomical parts of a forest fire

Bay: A marked indentation in the fire perimeter, usually located between two fingers (syn. Pocket)

Finger: An elongated burned area projecting from the main body of the fire resulting in an irregular fire perimeter.

Flanks: Those portions of the fire perimeter that are between the head and the back of the fire which are roughly

	<p>parallel to the main direction of spread</p> <p>Head: That portion of the fire perimeter having the greatest rate of spread and frontal fire intensity which is generally on the downwind and/or upslope part of the fire (syn. Front)</p> <p>Back: That portion of the fire perimeter opposite the head; the slowest spreading part of the fire syn. Base, Heel, Rear)</p> <p>Island: An area of unburned fuels located within the fire perimeter</p> <p>Point of Origin: The location within the fire perimeter where ignition first occurred (cf. Spot Fire)</p>
forest fire management	See: Fire Management
forest floor	<p>S:</p> <p>G: Waldboden</p> <p>F:</p> <p>Organic surface component of the soil supporting forest vegetation; comprised of litter, fermentation, and humus layers. The accumulated litter and layers on the floor are the most important fuels for a forest fire.</p>
forest industry (fire)	See under Fire Cause
forest protection	<p>S: proteccion forestal</p> <p>G: Forstschutz, Waldschutz</p> <p>F: protection forestiere</p> <p>That section of forestry concerned with the management of biotic and non-biotic damage to forests, arising from the action of humans (particularly unauthorized use of fire, human-caused wildfires, grazing and browsing, felling), natural wildfires, pests, pathogens, and extreme climatic events (wind, frost, precipitation)</p>
forest residue	<p>S: residuos forestales, desechos forestales</p> <p>G: Holzernterückstände, Schlagabraum</p> <p>F: remanents et couverture morte</p> <p>The accumulation in the forest of living or dead, mostly woody material that is added to and rearranged by human</p>

	activities such as forest harvest, cultural operations, and land clearing
Forward Looking Infrared (FLIR)	<p>S: ??? detector de infrarrojos G: Vorwärtsgerichter Infrarotsensor F: ??? detecteur infrarouge</p> <p>A hand held or aircraft mounted device designed to detect heat differentials and display their images on a video screen. FLIRs have thermal resolution similar to IR line scanners, but their spatial resolution is substantially less. They are commonly used to detect hot spots and flareups obscured by smoke, to evaluate the effectiveness of firing operations, to detect areas needing mopup work, and for other purposes.</p>
forward rate of spread	<p>S: G: Ausbreitungsgeschwindigkeit des Feuers F:</p> <p>The speed with which a fire moves in a horizontal direction across the landscape</p>
fragmentation	<p>S: G: Fragmentierung F:</p> <p>The process of transforming large continuous vegetation or landscape patterns into smaller patches by disturbance. Natural agents of fragmentation are fire, landslides, windthrow, insects, erosion. Human-induced fragmentations include land use (e.g., agriculture, grazing, forestry), construction of residential areas, roads and other infrastructures. Fragmentation involves change of fire regimes due to alteration and discontinuity of fuels (cf. Fuel Continuity)</p>
Free Burning	<p>S: G: Feuer mit Eigendynamik F:</p> <p>The condition of a fire or part of a fire that has not been slowed by natural or human-made barriers, or by control</p>

	measure
Free Flow	<p>S: caudal en (de) salida libre G: Freie Strömung F: debit maximum</p> <p>[Hydraulics] Maximum water flow rate a fire pump will attain when there are no restrictions at the pump outlet or losses due to friction or head</p>
friction loss	<p>S: perdida de carga, perdida de presion por roce G: Reibungsverlust F: perte de charge</p> <p>Pressure loss caused by the turbulent movement of water or solution against the interior surface of fire hose, pipe, or fittings; normally measured in pressure loss per length of hose or pipe</p>
front	<p>S: G: Front; Feuerfront F:</p> <p>(1) [Meteorology] The boundary between two air masses of different density. A cold front represents the leading edge of colder air replacing warmer air; the reverse of this is a warm front. (2) [Fire Terminology] The part of a fire within which continuous flaming combustion is taking place. Unless otherwise specified, the fire front is assumed to be the leading edge of the fire perimeter. In ground fires, the fire front may be mainly smouldering combustion.</p>
frontal fire intensity	<p>S: G: Feuerintensität (an der Feuerfront) F:</p> <p>The rate of heat energy release per unit time per unit length of fire front. Flame size is its main visual manifestation. Frontal fire intensity is a major determinant of certain fire effects and difficulty of control. Numerically, it is equal to the product of the net heat of combustion, quantity of fuel consumed in the flaming front, and linear rate of</p>

	spread. Recommended SI unit is kilowatts per metre (kW/m) (syn. Byram's Fireline Intensity [used mainly in the United States], cf. Flame Length).
Fuel	<p>S: combustible G: Brennmaterial, brennbares Material F: combustible</p> <p>All combustible organic material in forests and other vegetation types, including agricultural systems, such as grass, branches and wood, which create heat during the combustion process</p>
Fuel Accumulation	<p>S: G: Anhäufung von Brennmaterial F:</p> <p>Process or result of build-up of those elements of a vegetation complex which are not subject to biological decay, reduction by fire, animal grazing and browsing, or harvest by humans; used in characterising fuel dynamics between two fires and implications on fire behaviour. (cf. Fuel Appraisal)</p>
Fuel Appraisal	<p>S: G: Erfassung des Brennmaterials F:</p> <p>The process of first describing the fuel type characteristics and secondly interpreting the fuel description in terms of potential fire behaviour on the basis of past experience, comparative methods and mathematical models (Fuel Accumulation)</p>
Fuel Arrangement	<p>S: disposicion del combustible G: Räumliche Anordnung des Brennmaterials F: repartition des combustibles</p> <p>The horizontal and vertical distribution of all combustible materials within a particular fuel type</p>

Fuel Bed	<p>S: G: Brennmaterialbett (-schicht) F:</p> <p>The array of fuels in natural layers or experimental settings, characterized by specific loading, depth, compactness and particle size</p>
Fuel Bulk Density	<p>S: G: Dichte des Brennmaterials F:</p> <p>The dry weight of combustible materials per unit volume. Numerically, it is equal to fuel load divided by the depth of the particular fuel layer (e.g., duff, tree crown foliage). Recommended SI units are grams per cubic centimetre (g/cm^3) and kilograms per cubic metre (kg/m^3) (0.1 g/cm^3 is equivalent to 100 kg/m^3).</p>
Fuel Characteristics	<p>S: G: Eigenschaften des Brennmaterials F:</p> <p>Factors determining fuel properties such as compactness, loading, horizontal continuity, vertical arrangement, chemical content, size and shape, and moisture content</p>
Fuel Class	<p>S: tipo de combustibles, clase de combustibles G: Brennmaterialklasse F: classe de combustible</p> <p>A group of fuels possessing common characteristics. For instance, in the U.S. National Fire Danger Rating System (NFDRS), dead fuels are grouped according to their timelag (1-, 10-, 100-, and 1,000-hours timelag; see: Timelag). Living fuels are grouped as herbaceous (annual or perennial) or woody.</p>
Fuel Compactness	See: Compactness

Fuel Complex	<p>S: G: Brennmaterialkomplex F:</p> <p>The aggregate of fuels of characteristic species, arrangements and loads over a large area</p>
Fuel Components	<p>S: G: Komponenten des Brennmaterials F:</p> <p>Associations of fuel properties related to the way a fuel grows or is located after shedding or falling off, e.g., ground, surface, aerial or crown fuels</p>
Fuel Condition	<p>S: G: Zustand des Brennmaterials F:</p> <p>Relative flammability of fuel as determined by fuel type and environmental conditions</p>
Fuel Consumption	<p>S: G: Verbranntes Brennmaterial (Menge, Anteil) F:</p> <p>The amount of a specified fuel type or strata that is removed through the fire process, often expressed as a percentage of the preburn fuel weight (or fuel load). It includes available fuel plus fuel consumed after the fire front passes.</p>
Fuel Continuity	<p>S: continuidad del combustible G: Kontinuität des Brennmaterials F: continuité du combustible</p> <p>Degree or extent of continuous or uninterrupted distribution of fuel particles (surface or aerial) in a fuelbed thus</p>

	affecting a fire's ability to sustain combustion and spread (cf. Fragmentation)
Fuel Depth	S: G: Tiefe der Brennmaterialschicht F: The average distance from the bottom of the litter layer to the top of the layer of fuel, usually the surface fuel
Fuel Energy Available for Convection	S: energia de conveccion G: Energie für konvektive Aktivität F: energie de convection disponible That portion of the available fuel energy which is actually fed into the base of the convection column (cf. Available Fuel Energy, Energy Release Component)
Fuel Ladder	See: Ladder Fuel
Fuel Loading	S: carga de combustible G: Auflagegewicht des Brennmaterials F: biomasse de combustible The amount of fuel present expressed quantitatively in terms of weight of fuel per unit area. This may be available fuel (consumable fuel) or total fuel, usually expressed as oven-dry weight.
Fuel Management	S: ordenacion del combustible, manejo de combustibles G: Brennmaterialbehandlung, Brennmaterial-Management F: controle du combustible Act or practice of controlling flammability and reducing resistance to control of wildland fuels through mechanical, chemical, biological, or manual means, or by fire, in support of land management objectives
Fuel Model	S: modelo de combustible

	<p>G: Brennmaterial-Modell F: modele de combustible</p> <p>Simulated fuel complex for which all fuel descriptors required for the solution of a mathematical rate of spread model have been specified</p>
Fuel Moisture Analog	<p>S: modelo de humedad del combustible, simulador de humedad de i: combustibles muertos G: [Analog zur Messung des Feuchtigkeitsgehaltes von Brennmaterial] F: modele d'humidification du combustible</p> <p>Device that emulates the moisture response of specific classes of dead fuels, constructed from organic or inorganic materials (e.g., the use of half-inch ponderosa pine dowels in the U.S.A. representing ten-hour timelag fuels; cf. Fuel Moisture Indicator Stick)</p>
Fuel Moisture Content	<p>S: contenido de humedad del combustible G: Brennmaterialfeuchte, Feuchtigkeitsgehalt des Brennmaterials F: teneur en eau du combustible</p> <p>Water content of a fuel expressed as a percentage of the oven-dry weight of the fuel</p>
Fuel Moisture Indicator Stick	<p>S: tablillas indicadoras de la humedad del combustible G: [Indikator für Brennmaterialfeuchte] F: baton indicateur de teneur en eau du combustible</p> <p>A specially manufactured stick or set of sticks of known dry weight continuously exposed to the weather and periodically weighed to determine changes in moisture content as an indication of moisture changes in wildland fuels (Fuel Moisture Analog)</p>
Fuel Properties	<p>S: G: Eigenschaften des Brennmaterials F:</p>

	The primary physical characteristics of a fuel; e.g., quantity, size and shape, compactness, and arrangement
Fuel Reduction	<p>S: G: Verringerung/Herabsetzung der Auflage des Brennmaterials F:</p> <p>Manipulation, including combustion, or removal of fuels to reduce the likelihood of ignition, the potential fire intensity, and/or to lessen potential damage and resistance to control</p>
Fuel Size Class	<p>S: G: Größenklasse des Brennmaterials F:</p> <p>A category used to describe the diameter of down dead woody fuels. Fuels within the same size class are assumed to have similar wetting and drying properties, and to preheat and ignite at similar rates during the combustion process.</p>
fuel treatment	<p>S: tratamiento preventivo del combustible, reduccion de combust ibles G: Behandlung des Brennmaterials F: reduction de combustible</p> <p>Manipulation or removal of fuels to reduce the likelihood of ignition and/or to lessen potential damage and resistance to control (e.g., lopping, chipping, crushing, piling and burning (cf. Hazard Reduction)</p>
fuel type	<p>S: tipo de combustible G: Brennmaterial (Typ, Art) F: type de combustible</p> <p>An identifiable association of fuel elements of distinctive species, form, size, arrangement, or other characteristics that will cause a predictable rate of spread or resistance to control under specified weather conditions</p>
fuel type pattern	<p>S: disposicion de los combustibles, plano de combustibles G: Verteilungsmuster des Brennmaterials</p>

	<p>F: disposition des combustibles</p> <p>A mosaic of distinct fuel types on a given area</p>
fuelbreak	<p>S: area cortafuegos, cortacombustibles</p> <p>G: Feuerbarriere, Waldbrandriegel</p> <p>F: pare-feu vegetal, pare-feu cultivate, coupure verte, grande coupure</p> <p>Generally wide (20 - 300 meters) strips of land on which either less flammable native vegetation is maintained and integrated into fire management planning, or vegetation has been permanently modified so that fires burning into them can be more readily controlled (as distinguished from firebreak). In some countries fuelbreaks are integrated elements of agro-silvopastoral systems in which the vegetative cover is intensively treated by crop cultivation or grazing. Some fuelbreaks contain narrow firebreaks which may be roads or narrower hand-constructed lines. During fires, these firebreaks can quickly be widened either with hand tools or by firing out. Fuelbreaks have the advantages of preventing erosion, offering a safe place for firefighters to work, low maintenance, and a pleasing appearance (cf. Control Line, Agrosilvopastoral System, Buffer Strip/Zone).</p>
fuelbreak system	<p>S: red de areas cortafuegos, sistema de areas cortacombustibles</p> <p>G: Waldbrandriegelsystem</p> <p>F: maillage pare-feu, cloisonnement pare feu</p> <p>Two or more relatively large areas of naturally open vegetation, or converted vegetation cover, interconnected by fuelbreaks to form strategic locations for control of fires</p>
fugitive colour	<p>S: colorante fugaz</p> <p>G: Flüchtiger Farbstoff</p> <p>F: colorant fugace</p> <p>A colouring agent used in fire retardants that is designed to fade rapidly following retardant application in order to minimize the visual impacts of the retardant</p>
full response fire	S:

	<p>G: [unverzöglich, mit allen Mitteln bekämpftes Feuer] F:</p> <p>A wildfire which requires immediate, aggressive initial attack and/or sustained suppression action until the fire is declared out</p>
fume	<p>S: G: Rauch F:</p> <p>Any smokelike or vaporous exhalation from substances, especially of an odorous or harmful nature</p>
fusee	<p>S: bengala G: Signalfackel F: feu de signal</p> <p>A coloured flare designed as a railway warning device, widely used to ignite backfires and other prescribed fires</p>