

JUNIOR FOREST RANGERS

Curriculum Design

THE SIX PILLARS

An in-depth look at each pillar that make up the JFR curriculum and the types of projects that fit within each pillar



WILDFIRE



NATURAL RESOURCES & THE ENVIRONMENT



PARKS & STEWARDSHIP



LEADERSHIP & COMMUNITY ENGAGEMENT



TECHNICAL SKILLS & CERTIFICATIONS



TRADITIONAL ECOLOGICAL KNOWLEDGE

1. WILDFIRE







PURPOSE

Introduce JFR crews to wildfire prevention, wildfire operations, emergency preparedness and recovery. Projects build awareness of how wildfire affects Alberta's landscapes and communities and how trained personnel prepare for, respond to and recover from emergencies.

WHAT JFR CREWS CAN GAIN

Crews can develop an understanding of wildfire roles and procedures, prevention principles, emergency readiness and the teamwork required in response settings. Operational activities must follow applicable training, authorization and safety requirements.

POSSIBLE PROJECTS AND ACTIVITIES

- FireSmart education or approved vegetation-management projects
- Wildfire prevention and public awareness activities
- Pump and hose demonstrations or supervised practice labs
- Learning about wildfire equipment, communications and crew roles
- Partner-led introductions to wildfire operations
- Post-fire rehabilitation or site observations, where appropriate
- Emergency preparedness exercises or search-and-rescue learning scenarios
- Wildfire investigation education delivered by qualified personnel







2. NATURAL RESOURCES AND THE ENVIRONMENT

PURPOSE

Build knowledge and practical understanding of Alberta's forests, ecosystems, wildlife, vegetation, habitat and environmental conditions. Projects help JFR crews observe the natural world, collect or interpret information, and understand how natural-resource professionals monitor and manage it.

WHAT JFR CREWS CAN GAIN

Crews practice observation, identification, field data collection, industry knowledge and environmental awareness. Depending on the project, they may learn how evidence informs natural-resource management decisions.

POSSIBLE PROJECTS AND ACTIVITIES

- Forest health surveys and observations of tree condition
- Wildlife surveys, track and sign identification, or habitat observations
- Vegetation monitoring and plant identification
- Invasive species identification, mapping or removal where appropriate
- Habitat restoration or site rehabilitation
- Stream, wetland or other environmental assessment
- Learning from a Fish and Wildlife Officer
- Mill or cut block tours explaining how resources are managed and used







3. PARKS AND STEWARDSHIP

PURPOSE

Develop the skills, awareness and sense of responsibility needed to care for Alberta's parks, trails, recreation sites and other natural spaces. Projects give crews opportunities to contribute practical work that supports safe and responsible outdoor recreation.

WHAT JFR CREWS CAN GAIN

Crews learn how recreation infrastructure is maintained, how people use outdoor spaces, and how stewardship work can balance the protection of natural spaces while improving visitor experiences.

POSSIBLE PROJECTS AND ACTIVITIES

- Trail construction, brushing, tread repair or trail maintenance
- Campsite and recreation site maintenance
- Boardwalk or other recreation-infrastructure construction with appropriate oversight
- Recreation site improvements and approved visitor use projects
- Installing or maintaining signs, trail markers or interpretive features
- Litter clean ups and responsible use awareness activities
- Assessing trail or recreation site conditions and identifying improvement needs
- Helping rehabilitate areas affected by heavy use or environmental damage

4. TECHNICAL SKILLS AND CERTIFICATIONS

PURPOSE

Build practical outdoor and field skills that help JFR crews work safely, navigate unfamiliar places, use equipment appropriately and become more capable in outdoor settings. Some skills can be taught by trained JFR leaders and specialized or regulated activities require qualified instructors.

WHAT JFR CREWS CAN GAIN

Crews practice trip preparation, problem solving, safe equipment handling, navigation and outdoor survival and bushcraft skills. Where applicable, training may lead to a recognized certification or qualification.

POSSIBLE PROJECTS AND ACTIVITIES

- GPS, map-and-compass navigation and route-planning challenges
- Knots, tarp shelters and campsite set-up
- Backcountry cooking and camp routines
- Bushcraft activities and practical outdoor problem-solving
- Flatwater canoe skills or certification through an appropriate provider
- Safe, supervised use of hand tools for field projects
- ATV training or certification through an approved provider
- Chainsaw training delivered by a qualified instructor
- Field equipment care, packing, maintenance and trip preparation







5. LEADERSHIP AND COMMUNITY ENGAGEMENT







PURPOSE

Develop leadership skills and build connections with the communities they work in. Leaders and Crew members take on different leadership opportunities, community events, help the public understand the JFR program and the value of Alberta's natural spaces and natural resource work.

WHAT JFR CREWS CAN GAIN

Crews develop communication skills, learn to delegate tasks, lead projects or teaching sessions, public interaction and speaking skills. Activities can help them understand local priorities, meet people working in different fields and represent the program respectfully and professionally.

POSSIBLE PROJECTS AND ACTIVITIES

- Community presentations about JFR projects and summer experiences
- Public events, open houses and local celebrations
- Parades, demonstrations and community displays
- Career fairs and youth outreach
- Partner-led team challenges or community learning events
- Sharing project results, photographs or lessons learned with the public
- Collaborating with local organizations on an appropriate community project
- Public education about responsible recreation, stewardship or wildfire prevention

6. CULTURE AND TRADITIONAL ECOLOGICAL KNOWLEDGE

PURPOSE

Provide opportunities for JFR crews to learn about First Nations and Métis communities in Alberta, their cultures and relationships with the land, and environmental observations and teachings shared through Elders and Knowledge Keepers. Activities should be guided by community partners and delivered respectfully, with attention to local protocols and permissions.



WHAT JFR CREWS CAN GAIN

Crews can deepen their understanding of the diversity of Indigenous cultures and perspectives, develop respectful relationships, and learn how knowledge of place, plants, animals, seasons and land stewardship may be shared across generations.



POSSIBLE PROJECTS AND ACTIVITIES

- Culture camps developed with First Nations or Métis community partners
- Learning opportunities led by Elders and Knowledge Keepers
- Participation in community cultural events or powwows when invited and appropriate
- Learning about local history, place names and relationships with the land
- Plant identification and teachings about traditional plant uses when shared by Knowledge Keepers
- Learning about Indigenous perspectives on stewardship, wildlife, water or seasonal change
- Guided land-based learning activities shaped by community partners
- Discussions about how different knowledge systems can inform understanding of the environment, where appropriate and invited

