PLANNING EX I: BAY BLAZE

You live at Thumb Farm, a small farm 21 miles from Bay Bridge in the Yellowstone National Park (see map). It has been a long, hot summer and you have had an excellent wheat crop and your wheat is safely gathered in. The water level in the Lake has fallen and the forests are dangerously dry. There is considerable concern in this heavily forested area and there is a forest fire alert in force.

This morning your wife took your youngest son and nephew to the Bus station at Pebble Creek; a small town 40 miles by road from Bay Bridge. The Boys are due to catch the 9:45 am train to Madison to visit your parents. Your wife also plans to do some shopping for herself and a neighbour, Mrs Johnson, while she is Pebble Creek. Mr Johnson is in Madison hospital as a result of a car accident. Mrs Johnson, whose ankle was broken in the accident, is in plaster and is back at Fox Cottage with her six year old daughter and her aged mother who is helping out. Understandably she is presently without a car. The cottage is 12 miles from Bay Bridge and is at the end of the 3 mile track off the Whick road. Although it is only $3\frac{1}{2}$ miles from the cottage to the Alum Creek track to the east, the ground down to the lake side is rocky and almost impassable.

After shopping your wife aims to arrive at the Johnson's cottage by lunch-time. You do not expect her home before 5pm.

Your eldest son and a friend from College have gone in your 4 x 4 to fish at the Sister Lakes. To get there they have driven 2 miles up the Pelican Creek track and then walked for 10 minutes up the footpath to the lakes. They have taken a picnic lunch with them.

You and your sheepdog are just about to leave your farm on your tractor (the only vehicle left at the farm) to visit your 500 sheep. This entails travelling down the road for 2 miles and 1½ miles up the hill track. Suddenly you are aware of the smell of wood smoke on the freshening north easterly wind. At the same time you see a National Park Wardens vehicle approaching from Alum Creek. The vehicle stops in a

cloud of dust. The driver, whom you know, calls out that there is a forest fire raging to the North East at the head of Alum Creek some 10 miles away. He and two others working nearby were too late to contain the fire and two of them are now suffering from burns and smoke inhalation. He, the driver, has decided to take them via a short-cut hill track to the cottage hospital in Pebble Creek. Just as he drives off he asks you to inform the Park Fire Warden in Hayden that the fire is spreading fast and advancing, by his reckoning, at about 3mph. He adds that by now it will be 1 mile from Fishing Bridge. He stresses that the fire must be checked and must not be allowed to spread to the main forest areas. He tells you to get cracking and get the vital warning to the authorities, but he departs before you think of telling him you have no telephone.

Some of you immediate thoughts are:

- It is now 9.30 am
- Your eldest son and friends are fishing at the Sister Lakes
- Mrs Johnson, her children and Mother will be in danger
- Your wife has the Family Ford Estate which averages 25 mph on roads and 15 mph on tracks. She is likely to drive past Thumb Bridge between noon and 12.30pm

Your son has a 4 x 4 which averages 20 mph on roads, 10 mph on tracks. The only way out of Pelican Creek by vehicle is by the road past your house. Your son can be relied upon to act sensibly in an emergency.

You have the tractor which normally has an average road and track speed of 10 mph, but at present, with the ancillary equipment attached, this speed must be halved, it will take 30 minutes to detach the equipment.

There is a farm track which leads from the farm for 3 miles down to the Thumb Lake where there is a boat in a boatshed. It would take you 15 minutes to row across the lake at this point. It would then take you 10 minutes to climb up the footpath to the

cottage. The Johnson's have a telephone and there is a public call-box by the roadside at Thumb Bridge 16 miles away.

The low ground around your house is open fields, beyond the forest area there is mainly open grass field. If you could get your sheep down to the grassland near the farm they would be saved. You and your son can cover the ground at 3 mph if on a track. At this moment your random thoughts are disrupted by the arrival of a man and women carrying rucksacks, which approach and ask for directions to the Tower Springs which are 4 miles up Pelican Creek. You tell them of the forest fires. They become agitated and tell you that they were due to meet two friends at the springs on the previous day but they had been delayed. Their friends had said that they would probably stay there for a couple of days. The man and woman were worried that their friends would be at the falls and be in danger from the fire. You are surprised to hear about their friends as you have not seen them. Most campers in the area stop at your farm buy supplies for their journey. Knowing this, you consider that it is very possible they are at the springs.

Requirements

Write down your thought process in arriving at a plan in such a format that anyone reading it would be able to understand how and why you had arrived at your plan and exactly what your plan was and how long it would take to carry out.