What do you do?

GIS operator

Scribbly wants to know what a GIS operator does. He meets with Sandy from Forests NSW to find out more.

Scribbly: So what does GIS stand for and what does a GIS operator do?
Sandy: GIS stands for Geographic Information Systems. GIS operators do cool stuff like working with hi-tech computer hardware, software and digital photos of the landscape taken from planes and even satellites. GIS operators put information together to create maps. They study where things are in relation to each other like forests, rivers, roads, houses and more.

Scribbly: What do you need to know to become a GIS operator?
Sandy: To be a good GIS operator you need to be really good at using computers, which is a good thing because I love computers! You also need to be good at working out where things are in relation to each other. It’s like being an explorer discovering new landscapes!

Scribbly: How does GIS help Forests NSW?
Sandy: GIS helps Forests NSW in lots of ways. We help show where different forests are and what types of trees are in those forests. We can also show plantations and how old the trees are in the plantations. GIS show roads and tracks in forests so forest managers know what areas need special attention. One of the most important things though is showing where wildlife habitats are so that foresters know where they are during timber harvesting and bushfires.

Scribbly: What’s the difference between geography and cartography?
Sandy: Geography is the study of the landscape and the location of places or things in the world, both natural and man-made. Cartography is putting geography on the computer and paper. For the two to work together, a GIS operator has to have good skills in making it easy for readers to see where things are and the distances between things.

Scribbly: How do maps help with fighting forest fires?
Sandy: Maps are a very good way of showing where things are on the ground in relation to each other. In a bushfire, maps show firefighters which roads they can take to get to the fire to put it out. Maps also show what sort of forest the fire may be heading towards and where dams are located to get water to put the fire out. Did you know fires can be mapped? We can get planes to fly over the fire and take photos of it, these photos are then added to the map on the computer to see where the fire has burnt and where it’s headed.

Scribbly: In what other ways can GIS help people?
Sandy: GIS helps lots of different people in the community. Special maps can help local councils with town planning. GIS can help emergency services, by showing where fire trails are and for tourism by showing where landscape features are that people would like to visit. Without GIS, making maps would take a lot longer!

Scribbly: What do you like best about being a GIS operator?
Sandy: GIS is fun because I get to meet lots of interesting people in different jobs. It’s also great because I can discover new things in the landscape like wildlife areas and new owl habitats. GIS is also rewarding because I can help people solve problems by making special maps for them.
Can you read Sandy's map? Find out...

1. The direction of the picnic area from Watery Creek?
2. How far is the nearest ringtail possum sighting to the Picnic area?
3. Name five features Sandy has included on this map eg. Local State Forest boundary.