Why did Noah send out birds?

He was trying to determine if the ground had dried up enough near the ark to be safe for people and the animals. He knew that the tops of the mountains were above water (8:5), but without removing the top covering of the ark (8:13) he was unable to see much. He had sent out a raven as a probe, but by not returning the raven only showed that the earth was safe for ravens.

Was the dove chosen because it was cautious?

The dove and the raven were like space probes sent to an unexplored planet, but the dove was much more helpful. Its cautious nature made it a better instrument for measuring livability, and its instinctive interest in plants did as well. Apparently it explored for an entire day the second time since it did not return until evening (8:10-11). Despite finding plant life that day, it decided that returning to the familiar ark at night was the safer thing to do. Only on its third outing did it decide that it was safe to remain outside (8:12). Like Noah, the dove was cautious.

Why else was the dove a good choice?

A dove is very different from an eagle which could have easily flown far away to the distant mountain, as well as from a duck and other seabirds which would have happily floated and rested on the water. Doves and pigeons also have good homing instincts. So the dove would naturally have been more likely to return than various other birds. Noah was probably well aware of all these things and had probably learned from an earlier mistake with the raven.

Was Noah a model researcher?

Yes, perhaps he was. So there are basic principles for research to be learned from his use of the dove just as there are basic principles of education to be learned from Adam's naming the animals.

Why did the dove bring back an olive leaf?

It may have involved nesting instinct or natural interest in fruit bearing trees. On the other hand, the dove was undoubtedly providentially guided to do as it did since the olive leaf was informative and encouraging to Noah (8:11). There is no contradiction between the dove being free to go wherever it wished and God providentially leading it to do as it did.

Was the probing actually necessary?

Soon afterward, the Lord directly commanded Noah to open the ark and let out all the animals (8:15-19). So the repeated probing with the dove was unnecessary in an absolute sense. Yet, it was not wrong to do it. God expects people to do research.

What is the application?

Like Noah, we should be actively interested in our surroundings and use God-given wisdom and tools to investigate things that impact our lives, rather than just "waiting upon the Lord." For sure, God has a plan, but he wants us to be actively involved in such, including through investigating factors that are unknown but knowable.