

Success Story 2: National DNA work solve 10-year-old murder

The victim had died in an area well known to police as a hangout for substance abusers.

She was 55-year-old Virginia Johanson, a resident of High Level, Alberta, about 800 kilometres northwest of Edmonton. An autopsy found multiple bruises and broken bones, but the cause of death was inconclusive. The overnight temperature had dipped close to zero degrees and the Medical Examiner concluded that she had probably died from hypothermia.

The discovery of the body sparked a full-scale police investigation. Members of the local RCMP detachment logged hundreds of hours interviewing potential suspects and following dozens of leads. Unfortunately, this did not result in any conclusive information to assist in solving the crime.

The autopsy yielded a semen sample that was sent for DNA profiling to the RCMP's Forensic Laboratory Services. Police interviewed dozens of local men and, with their consent, obtained blood samples that generated DNA profiles for comparison with that of the attacker.

There were no direct matches and, at that time, the National DNA Data Bank did not exist. However, DNA was used to eliminate some of those under suspicion in the case.

Six years later, the NDDB opened its doors, equipped with the latest in advanced technology to help link convicted offenders to unsolved crimes. The Edmonton site of the RCMP Forensic Laboratory Services

submitted the DNA profile from the autopsy and hoped for a match.

In the meantime, Calgary police had arrested a suspect for an alleged sexual assault. He had a lengthy criminal record for violent offences. He was convicted of the Calgary crime and according to a provision of the *DNA Identification Act*, the judge in the case ordered that a biological sample be taken. The resulting DNA profile was uploaded to the NDDB's Convicted Offender Index.

When scientists ran the profile through the database, it generated a "hit" with the crime scene profile from the murder in High Level, Alberta. This was strong evidence that put the offender at the scene of the 1994 murder.

Armed with this powerful new lead, RCMP investigators interviewed the offender at Bowden Federal Institution where he was serving time for the Calgary assault. When confronted with the DNA evidence, he confessed. He was subsequently convicted of manslaughter and sentenced to additional prison time.

Police had never considered this individual as a suspect, even though he was known to the victim. The officers had been told he was fighting forest fires at the time. Diligent police work kept the investigation alive, DNA produced the vital piece of evidence and the NDDB made the critical link to the killer.

Data Bank and diligent police

