Metadata are an essential tool for use in the management of geoscientific information. Well-managed metadata provide a number of key information management functions, including facilitating data discovery and providing a robust framework for information asset management. The realization of these and other benefits is predicated on the existence of well-maintained metadata. Sadly, metadata are commonly absent, incomplete, inaccurate, inarticulate, or obsolete. Some of the benefits and opportunities that arise from well-managed metadata collections are discussed here. The rapid development of spatial data infrastructures means that maintenance of metadata for geoscience information is becoming increasingly important.