Acknowledgements

This thesis could not have happened without the support and assistance from many individuals.

First and foremost, I consider it an honor to have worked with my guide Dr. Y.V. Jhala, on his research project. He has been a continuous source of support and inspiration over the course of my study. He is not only a great teacher and advisor, but also a friend. His guidance and patience with me during my ups and downs was comforting and reassuring and I owe a lot to him in helping me finish this thesis. I must admit, working with him I have improved as a student, hardened as a researcher, grown as a person; in nutshell, I have learnt lot from him. Also, I am very grateful to him for introducing me to the spectacular desert landscape of Kutch, without which a colourful chapter in my life would be missing.

The Research Project titled “Research and Conservation of Endangered and Threatened Fauna of Kutch” was funded from the Grant-in-Aid allocations of the Wildlife Institute of India. I acknowledge the support extended by Mr. P. R. Sinha, Director WII, Dr. V. B. Mathur, Dean WII and Dr. K. Sankar, Research Coordinator WII, for their efforts in making this long term research project a successful venture.

I am grateful to the Chief Wildlife Warden and Forest Department of Gujarat, particularly Kutch circle, for granting permissions to use telemetry on hyaenas and for their extended support during my fieldwork.

I will always be thankful to Dr. S.A. Hussain, hostel warden who went above and beyond to provide all facilities for my comfortable stay in WII. I thank Dr. Qamar Quereshi, Dr. B.C. Chowdary, Dr. V.P. Uniyal for all their help extended to me, academic and otherwise. I would like to thank Bapu and Mrs. Jhala, for their constant support and encouragement.

I extend my warm appreciation to the staff of library, Sh. Y.S. Verma, Sh. Madan, Sh. Kishan, Sh. Mahesh Ghosh, Sh. Virender, Mrs. Shashi and Mrs. Sunita for their assistance and providing all necessary help. I am thankful to Sh. Naveen Singhal, Sh. Khadak Singh and Sh. Dubey from the account section, for handling finances of the
project and my fellowship. I really appreciate the efforts of Sh.Rajesh Thapa, Sh. Muthu Verapan, Sh.Veerender Sharma, Sh.Dinesh Pundir, Sh.Lekhnath Sharma and Sh.Manoj Agrawal, in helping me utilize the facilities at GIS cell, DTP room and Computer room. I sincerely thank Sh. Vinod Thakur for providing reference key for identification of prey remains in hyaena scats and also helping me with it. I am especially thankful to Sh. Vinay Sharma for his boundless help and pleasant company throughout my stay in the Institute. I am grateful to Mr. Gyanesh Chhiber & Prof. V.C.Soni, for facilitating in the completion of formalities for Phd registration till its submission.

Kutch has been a collection of experiences that I will never forget. This has been quite the journey, through the bewildering diversity of landscapes, wildlife and culture. I am indebted to the people of Kutch, who were exceptionally generous, always accommodated me with all their warmth and friendliness. I am also grateful to all the people who allowed me to interview them and shared the insights into life in Kutch, and also all who willingly helped and participated in this study. They always made me feel welcome, whenever I turned up in their midst wanting to find out about hyaenas on their lands.

Much of the data presented in this dissertation were not easy to collect and demanded long hours of radio-tracking at odd hours of the night, extensive foot surveys in the desert for hyaena dens, collecting truck loads of scats and washing them and tough lengthy durations spent observing hyaenas. I am thankful to my field assistants Lal Singh Negi, Ibla Mandra, Rekha Negi, Ishaik Bhatti, Shanker Maheshwari, Devji Kanji, Lakma Paradhi, Shamji Paradhi, Osman Lodhra, Sattar Pinjara, Veelji Kholi, Ramzan Mandra, Araf Kholi, Harish Kholi, Ishwar Paradhi, Naveen Paradhi, Ramesh Paradhi, Kanji Paradhi and Ramji Paradhi for, without their persevered efforts in difficult field conditions, the most crucial part of my PhD, data collection, would have been an insurmountable task. I still feel that I have not been able to express the deep gratitude I owe them for their part in maintaining my general sanity and gratification in the field, and in making this Dissertation possible. Special thanks goes to the staff at camp, Lal Singh Negi and his family, Rekha Negi and his two little daughters, for keeping me well-fed and in good-spirits.
Given my love for horses, I feel very fortunate to have had three beautiful horses in our field camp. I specially thank the beautiful horses Shabnam (Shibu), Chetak and Kalyani (Kallu) for providing companionship and comforting escapes from stressful times. Times spent with them are some of the most memorable experiences in my life; I carry away the upmost respect for the strength, speed, liveliness, affection and loyalty of these noble animals.

In spending long periods in field, I formed many friendships that made living away from home for so long not only bearable, but also immensely enjoyable. I sincerely appreciate all the help provided by Mr and Mrs Mayurdhwaj Singh Jadeja in setting up the field camp and extending helping hand at every needy moment. I thank Dr. Rakesh Patel and Dr. S.S. Patel for their assistance during the course of the study. Kartikeya Chauhan, Dr.Bharat Jethva, Raja, Ramdev, Ibla Khatri, Abbas Khatri, Ashwin Powal, Shantilal Varu, Naveen Bapat, Raghuveer Singh Jadeja (RFO), Jayesh, Shailesh, Mahendra, Mahesh bhai, Dr. Jugal Tiwari and Devesh Gadhvi made my stay and work in Kutch pleasant and easier. Also, Dr. Pratyush Patankar from Baroda for his immense support.

I acknowledge the support extended by Mr. Ravi Singh, CEO WWF-India, Dr. Sejal Worah, Dr. Parkshit Gautham and Mrs. Anjana Pant from WWF, for providing financial support, in form of a small grant during thesis writing. I sincerely thank Dr.Harish Guleria, Dr. Dipankar Ghosh and Mr.Naresh Kapila from WWF, for considering my month long leave from WWF, for the purpose of completing the final phase of my thesis writing. This leave has helped the timely completion of the thesis work.

I must specially thank Rupesh, Swati, Parobita, Ninad, Ridhima and Samhita for helping me with GIS and maps.

I have been fortunate to have some amazing colleagues in field, Chandrima, Paulamee, Kamlesh, Sutirtho and Divya. I would like to thank them for their help, support and memorable company during my stay in field. I have learned a lot from them, and have come to admire their work culture and ethic.

To my long-term colleagues Kamlesh & TT, thank you for helping me deal with the difficult situations at the field base, helping me out in fieldwork and for always being
around. Kamlesh has been with me through thick and thin, literally, having endangered our lives together many a time. I will always cherish the times spent together riding horses, and his unshakable motivation for many of our field exploits, and I owe you for the academic help during the analysis and writing of my thesis, which made a big difference and thank you for being a great friend. TT is the ever-calming presence and his humor has kept our spirits afloat during the lows, his academic inputs have helped direct and present my work better and he has been a constant source of encouragement and help, thank you for being there.

I am grateful for the continued support and patience of my close friends and well wishers. First and foremost, I would like to thank G.P.boys (Shiva, Naveen, Suparsh, Raghu, Joseph, Vivek, Ravi, and Chaitanya), in their company I have been molded to a great extent to what I am today and have never lost my zeal for wildlife. I also thank my childhood friends, Sumit Arora and Sanjay, who have always supported me in their own way.

I am indebted to my friends at WII and in Kutch, Bibek, Amit (golu), Upamanyu, Sabyada, Ashish David, Chittranjan, Kartikeya chauhan, Anupam Shrivastava, Rocky, Ambika, Gopi G.V, Jimmy Borah, Joseph Vattakavan, Pankaj Sahani, Asgar Nawab, Poonam Semwal, Kamal Chetri, Manish, Chandrima, Rishi, Udayan, TP, Abishek, Pranav, Navendu, Varun, Mousumi, Jagadeesh, Merwin, Darsh, Rupesh, Tirtho, Kamlesh, Ishan, Parichay, Deep, Kaushik, Abesh, Shantanu, Krishnendu, Monica, Shazia, Pariva, Vinay, Shobuj, Ninad raut, Salvador, Roshini, Bipin, Chandrima, Ridhima, Parobita, Ninad sastry, Swati, Samhita Pruthvi, Srinivas, Sharmila, Ashok, Naresh, Pragteesh, Sudip, Manjari Roy, Shika, Nandkishore, Janmejay, Ishwari, Gajendra singh, Madura, Indronil, Sitendu, Kunzes, Jiju and Tauqueer, many have been a source of inspiration, many poured in their kind support and inputs, and many nursed me back to health when I was ill and with broken bones. A good support system is important to surviving and staying sane. Thank you for trying to keep me sane (and almost succeeding!). I must thank the basketball team in WII, for keeping me fit, well that is what I would like to believe.

On a more personal note, I have to thank my family without whom none of this would have been possible. I want to thank my parents, Mr.I.S.Ponnappa and Mrs. Sunanda Ponnappa, and my brother I.P.Somanna, for their continued love and support over the
years to the uncertain life of wildlife research and conservation. My in-laws Dr. Lakshman K. Kolipakam and Mrs. Lavanya Kolipakam and my extended family, Vasudha, Arvind & li’l Adya for having faith in me and for their constant encouragement and support.

A very special thank you (for lack of a better word), to my wife, Vishnupriya Kolipakam, for always being there when I needed her. Without her support, valuable assistance, love, encouragement and most importantly (im)patience with me, this thesis would have been impossible.

In the splendid six years of my journey, the list of people who offered their help, support and friendship are numerous. If I have forgotten to mention any individual, it is just an outcome of old age and a failing memory and should not be mistaken for ingratitude. I appreciate everyone who has intentionally and unintentionally contributed towards completion of this work and I thank everyone from the bottom of my heart.

And finally, for giving me a glimpse of their world, for tolerating me, for teaching me and for giving me some of the most memorable experiences in my life, I must thank the hyaenas of Kutch.