Paper where data has been collected from so far:

Biesmeijer, J. C., Roberts, S. P. M., Reemer, M., Ohlemüller, R., Edwards, M., Peeters, T., Schaffers, A. P., Potts, S. G., Kleukers, R., Thomas, C. D., Settele, J., & Kunin, W. E. (2006). Parallel Declines in Pollinators and Insect-Pollinated Plants in Britain and the Netherlands. Science, 313(5785), 351-354. 10.1126/science.1127863

Bommarco, R., Lundin, O., Smith, H. G., & Rundlöf, M. (2011). Drastic historic shifts in bumble-bee community composition in Sweden. Proceedings of the Royal Society of London B: Biological Sciences, rspb20110647.

Burkle, L. A., Marlin, J. C., & Knight, T. M. (2013). Plant-pollinator interactions over 120 years: loss of species, co-occurrence, and function. Science, 339(6127), 1611-1615.

Carvalheiro, L. G., Kunin, W. E., Keil, P., Aguirre-Gutiérrez, J., Ellis, W. N., Fox, R., Groom, Q., Hennekens, S., Van Landuyt, W., Maes, D., Van de Meutter, F., Michez, D., Rasmont, P., Ode, B., Potts, S. G., Reemer, M., Roberts, S. P. M., Schaminée, J., Wallisdevries, M. F., & Biesmeijer, J. C. (2013). Species richness declines and biotic homogenisation have slowed down for NW-European pollinators and plants. Ecology Letters, 16(7), 870-878. 10.1111/ele.12121

Colla, S. R., Ascher, J. S., Arduser, M., Cane, J., Deyrup, M., Droege, S., Gibbs, J., Griswold, T., Hall, H. G., Henne, C., Neff, J., Jean, R. P., Rightmyer, M. G., Sheffield, C., Veit, M., & Wolf, A. (2012). Documenting Persistence of Most Eastern North American Bee Species (Hymenoptera: Apoidea: Anthophila) to 19902009. Journal of the Kansas Entomological Society, 85(1), 14-22. 10.2317/JKES110726.1

Dupont, Y. L., Damgaard, C., & Simonsen, V. (2011). Quantitative historical change in bumblebee (Bombus spp.) assemblages of red clover fields. PLoS ONE, 6(9) 10.1371/journal.pone.0025172

Eskildsen, A., Carvalheiro, L. G., Kissling, W. D., Biesmeijer, J. C., Schweiger, O., & Høye, T. T. (2015). Ecological specialization matters: Long-term trends in butterfly species richness and assemblage composition depend on multiple functional traits. Diversity and Distributions, 21(7), 792-802. 10.1111/ddi.12340

Filz, K. J., Wiemers, M., Herrig, A., Weitzel, M., & Schmitt, T. (2013). A question of adaptability: Climate and habitat change lower trait diversity in butterfly communities in south-western Germany. European Journal of Entomology, 110(4), 633-642. 10.14411/eje.2013.086

Grixti, J. C., Wong, L. T., Cameron, S. A., & Favret, C. (2009). Decline of bumble bees (Bombus) in the North American Midwest. Biological Conservation, 142(1), 75-84. 10.1016/j.biocon.2008.09.027

Martins, A. C., Gonçalves, R. B., & Melo, G. A. R. (2013). Changes in wild bee fauna of a grassland in Brazil reveal negative effects associated with growing urbanization during the last 40 years. Zoologia, 30(2), 157-176. 10.1590/S1984-46702013000200006

Roubik, D. W. (2001). Ups and downs in pollinator populations: When is there a decline? Ecology and Society, 5(1)

Senapathi, D., Carvalheiro, L. G., Biesmeijer, J. C., Dodson, C. A., Evans, R. L., McKerchar, M., Morton, D. R., Moss, E. D., Roberts, S. P. M., Kunin, W. E., & Potts, S. G. (2015). The impact of over 80 years of land cover changes on bee and wasp pollinator communities in England. Proceedings of the Royal Society B: Biological Sciences, 282(1806) 10.1098/rspb.2015.0294

Thomas, J. A., Telfer, M. G., Roy, D. B., Preston, C. D., Greenwood, J., Asher, J., Fox, R., Clarke, R. T., & Lawton, J. H. (2004). Comparative losses of British butterflies, birds, and plants and the global extinction crisis. Science, 303(5665), 1879-1881.

Wallisdevries, M. F., Van Swaay, C. A. M., & Plate, C. L. (2012). Changes in nectar supply: A possible cause of widespread butterfly decline. Current Zoology, 58(3), 384-391. 10.1093/czoolo/58.3.384

Wenzel, M., Schmitt, T., Weitzel, M., & Seitz, A. (2006). The severe decline of butterflies on western German calcareous grasslands during the last 30 years: A conservation problem. Biological Conservation, 128(4), 542-552. 10.1016/j.biocon.2005.10.022

Maes, D., & Van Dyck, H. (2001). Butterfly diversity loss in Flanders (north Belgium): Europe's worst case scenario? Biological Conservation, 99(3), 263-276.

From the top of my head:

I would retrieve data from De Palma (she uses estimates based on LUC, but she has data for all countries in EU).

<http://onlinelibrary.wiley.com/doi/10.1111/ddi.12638/full>

Jeff Ollerton has a Science paper reporting UK level extinctions. Add it for completeness, but as mine (or one of Colla’s) we should diferenciate alpha from gamma diversity)

I would look into Anton Pauw papers for south Africa, He may (or may not) have something.

[Reconstruction of historical pollination rates reveals linked declines of pollinators and plants](javascript:void(0))

A Pauw, JA Hawkins

Oikos 120 (3), 344-349

The IUCN red list from Nieto? Not sure it’s usable.

Peter Keil on hoverflies. <http://onlinelibrary.wiley.com/doi/10.1111/j.1366-9516.2005.00172.x/abstract> (he may have more).

Scheper et al 2014 PNAS (not sure he has richness, though)

And I will do a search to see what else I can find. I won’t be surprised if there is anything in lesser journals comparing before after for specific regions of e.g. china, o sud America.

Thanks Jamie!