**Table S8.** Summary of overlap between current and future climatically suitable habitats for threatened plant species organized by nature reserve.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Nature | 2050s-Low | 2050s-Medium | 2050s-High | 2080s-Low | 2080s-Medium | 2080s-High |
| Banqiao | 0.962  | 0.943  | 0.911  | 0.956  | 0.912  | 0.803  |
| Gujingyuan | 0.921  | 0.893  | 0.867  | 0.919  | 0.855  | 0.777  |
| Qingliangfeng | 0.879  | 0.868  | 0.827  | 0.872  | 0.826  | 0.686  |
| Songshan | 0.935  | 0.959  | 0.903  | 0.948  | 0.926  | 0.877  |
| Daiyunshan | 0.800  | 0.787  | 0.739  | 0.777  | 0.759  | 0.657  |
| E'meifeng | 0.832  | 0.832  | 0.746  | 0.797  | 0.771  | 0.621  |
| Longqishan | 0.882  | 0.891  | 0.838  | 0.871  | 0.859  | 0.761  |
| Minjiangyuan | 0.843  | 0.829  | 0.784  | 0.827  | 0.455  | 0.747  |
| Tingjiangyuan | 0.773  | 0.754  | 0.687  | 0.718  | 0.700  | 0.578  |
| Xiongjianghuangchulin | 0.811  | 0.806  | 0.769  | 0.817  | 0.787  | 0.673  |
| Lianhuashan | 0.920  | 0.926  | 0.943  | 0.920  | 0.924  | 0.966  |
| Qinzhouzhenxishuishengyeshengdongwu | 0.852  | 0.810  | 0.792  | 0.855  | 0.801  | 0.647  |
| Taizishan | 0.977  | 0.973  | 0.968  | 0.978  | 0.968  | 0.933  |
| Yuhe | 0.850  | 0.809  | 0.776  | 0.846  | 0.787  | 0.688  |
| Haifengniaolei | 0.992  | 0.993  | 0.987  | 0.990  | 0.982  | 0.980  |
| Lianzhoutianxin | 0.889  | 0.866  | 0.838  | 0.868  | 0.823  | 0.719  |
| Luokeng'exi | 0.918  | 0.880  | 0.864  | 0.888  | 0.850  | 0.787  |
| Shimentai | 0.871  | 0.831  | 0.828  | 0.843  | 0.798  | 0.742  |
| Xiangtoushan | 0.922  | 0.904  | 0.894  | 0.912  | 0.885  | 0.870  |
| Yunkaishan | 0.943  | 0.920  | 0.922  | 0.930  | 0.894  | 0.875  |
| Bangliangchangbiyuan | 0.876  | 0.900  | 0.885  | 0.905  | 0.861  | 0.834  |
| Chongzuobaitouyehou | 0.941  | 0.919  | 0.909  | 0.937  | 0.879  | 0.875  |
| Daguishan'exi | 0.898  | 0.875  | 0.871  | 0.872  | 0.823  | 0.780  |
| Dayaoshan | 0.890  | 0.885  | 0.850  | 0.863  | 0.823  | 0.769  |
| Encheng | 0.866  | 0.866  | 0.861  | 0.875  | 0.851  | 0.877  |
| Fangchengjinhuacha | 0.941  | 0.934  | 0.941  | 0.935  | 0.900  | 0.928  |
| Huaping | 0.904  | 0.897  | 0.875  | 0.884  | 0.854  | 0.764  |
| Jiuwanshan | 0.829  | 0.838  | 0.800  | 0.831  | 0.781  | 0.713  |
| Qichong | 0.834  | 0.818  | 0.780  | 0.812  | 0.763  | 0.708  |
| Shiwandashan | 0.927  | 0.922  | 0.917  | 0.925  | 0.887  | 0.902  |
| Yinzhulaoshanziyuanlengshan | 0.933  | 0.931  | 0.934  | 0.935  | 0.905  | 0.839  |
| Yuanbaoshan | 0.832  | 0.845  | 0.792  | 0.834  | 0.782  | 0.697  |
| Dashahe | 0.773  | 0.771  | 0.711  | 0.778  | 0.726  | 0.598  |
| Fodingshan | 0.801  | 0.829  | 0.767  | 0.828  | 0.795  | 0.711  |
| Leigongshan | 0.849  | 0.876  | 0.817  | 0.880  | 0.820  | 0.692  |
| Yinggeling | 0.911  | 0.897  | 0.881  | 0.898  | 0.880  | 0.865  |
| Changlihuangjinhai'an | 0.994  | 0.881  | 0.874  | 0.870  | 0.780  | 0.692  |
| Qingyazhai | 0.872  | 0.845  | 0.828  | 0.874  | 0.830  | 0.773  |
| Tuoliang | 0.975  | 0.943  | 0.940  | 0.967  | 0.943  | 0.880  |
| Xiaowutaishan | 0.871  | 0.875  | 0.833  | 0.900  | 0.849  | 0.784  |
| Baotianman | 0.825  | 0.781  | 0.758  | 0.820  | 0.758  | 0.607  |
| He'nandabieshan | 0.935  | 0.928  | 0.884  | 0.936  | 0.887  | 0.781  |
| Gaoleshan | 0.789  | 0.747  | 0.655  | 0.779  | 0.680  | 0.546  |
| Huangheshidi | 0.863  | 0.859  | 0.860  | 0.865  | 0.868  | 0.691  |
| Jigongshan | 0.798  | 0.763  | 0.715  | 0.787  | 0.717  | 0.571  |
| Beijicun | 0.888  | 0.888  | 0.865  | 0.896  | 0.888  | 0.827  |
| Chuonahe | 0.897  | 0.891  | 0.884  | 0.903  | 0.892  | 0.859  |
| Daxiagu | 0.927  | 0.907  | 0.904  | 0.932  | 0.888  | 0.820  |
| Dongbeihu | 0.966  | 0.954  | 0.934  | 0.968  | 0.935  | 0.851  |
| Dongfanghong | 0.962  | 0.932  | 0.912  | 0.959  | 0.914  | 0.821  |
| Duobuku'er | 0.960  | 0.969  | 0.969  | 0.965  | 0.963  | 0.860  |
| Fenglin | 0.952  | 0.943  | 0.917  | 0.952  | 0.925  | 0.823  |
| Fenghuangshan | 0.938  | 0.916  | 0.898  | 0.939  | 0.893  | 0.826  |
| Gongbielahe | 0.983  | 0.989  | 0.971  | 0.987  | 0.992  | 0.909  |
| Lingfeng | 0.966  | 0.954  | 0.955  | 0.962  | 0.960  | 0.952  |
| Maolan'gou | 0.976  | 0.981  | 0.917  | 0.978  | 0.979  | 0.921  |
| Mingshui | 0.888  | 0.953  | 0.955  | 0.929  | 0.884  | 0.895  |
| Mudanfeng | 0.953  | 0.939  | 0.925  | 0.956  | 0.910  | 0.815  |
| Pingdingshan | 0.957  | 0.942  | 0.922  | 0.956  | 0.921  | 0.851  |
| Qixingfengdongbeihu | 0.940  | 0.928  | 0.906  | 0.944  | 0.898  | 0.795  |
| Sanhuanpao | 0.910  | 0.879  | 0.857  | 0.916  | 0.854  | 0.757  |
| Shankou | 0.954  | 0.958  | 0.960  | 0.958  | 0.962  | 0.924  |
| Taipinggou | 0.980  | 0.977  | 0.968  | 0.989  | 0.965  | 0.883  |
| Wuyiling | 0.970  | 0.965  | 0.941  | 0.972  | 0.952  | 0.886  |
| Wuyu'erhe | 0.941  | 0.884  | 0.833  | 0.934  | 0.930  | 0.885  |
| Wudalianchihuoshandizhiyiji | 0.953  | 0.957  | 0.955  | 0.961  | 0.967  | 0.947  |
| Xiaobeihu | 0.967  | 0.955  | 0.941  | 0.969  | 0.935  | 0.842  |
| Xinqingbaitouhe | 0.975  | 0.979  | 0.967  | 0.977  | 0.971  | 0.903  |
| Youhao | 0.943  | 0.930  | 0.910  | 0.945  | 0.923  | 0.861  |
| Zhongyangzhanheizuisongji | 0.872  | 0.873  | 0.846  | 0.869  | 0.863  | 0.834  |
| Badongjinsihou | 0.869  | 0.850  | 0.819  | 0.873  | 0.815  | 0.652  |
| Duheyuan | 0.893  | 0.875  | 0.844  | 0.899  | 0.852  | 0.695  |
| Hubeidabieshan | 0.900  | 0.887  | 0.838  | 0.893  | 0.835  | 0.720  |
| Mulinzi | 0.941  | 0.939  | 0.904  | 0.935  | 0.891  | 0.722  |
| Nanhe | 0.760  | 0.743  | 0.700  | 0.774  | 0.692  | 0.639  |
| Qizimeishan | 0.687  | 0.702  | 0.625  | 0.697  | 0.650  | 0.504  |
| Saiwudang | 0.810  | 0.793  | 0.749  | 0.829  | 0.760  | 0.659  |
| Sanxiadalaoling | 0.818  | 0.812  | 0.753  | 0.833  | 0.768  | 0.636  |
| Shennongjia | 0.881  | 0.871  | 0.851  | 0.890  | 0.853  | 0.763  |
| Shibalichangxia | 0.935  | 0.926  | 0.898  | 0.939  | 0.902  | 0.796  |
| Wudaoxia | 0.747  | 0.710  | 0.672  | 0.755  | 0.681  | 0.615  |
| Xianfengzhongjianheda'ni | 0.757  | 0.765  | 0.702  | 0.761  | 0.720  | 0.539  |
| Xingdoushan | 0.847  | 0.840  | 0.792  | 0.847  | 0.787  | 0.657  |
| Ye'rengu | 0.867  | 0.848  | 0.814  | 0.880  | 0.809  | 0.693  |
| Baiyunshan | 0.850  | 0.874  | 0.791  | 0.850  | 0.800  | 0.649  |
| Dong'anshunhuangshan | 0.860  | 0.846  | 0.814  | 0.843  | 0.801  | 0.708  |
| Dongdongtinghu | 0.837  | 0.816  | 0.765  | 0.791  | 0.769  | 0.741  |
| Gaowangjie | 0.808  | 0.817  | 0.726  | 0.808  | 0.742  | 0.563  |
| Hupingshan | 0.892  | 0.895  | 0.845  | 0.900  | 0.849  | 0.667  |
| Jintongshan | 0.866  | 0.853  | 0.824  | 0.858  | 0.813  | 0.719  |
| Jiuyishan | 0.926  | 0.920  | 0.902  | 0.919  | 0.895  | 0.816  |
| Wuyunjie | 0.825  | 0.805  | 0.757  | 0.823  | 0.758  | 0.633  |
| Xidongtinghu | 0.912  | 0.919  | 0.896  | 0.911  | 0.891  | 0.859  |
| Baishanyuanshe | 0.939  | 0.872  | 0.873  | 0.949  | 0.841  | 0.716  |
| Boluohu | 0.987  | 0.961  | 0.958  | 0.965  | 0.980  | 0.971  |
| Hunchundongbeihu | 0.930  | 0.900  | 0.868  | 0.931  | 0.864  | 0.748  |
| Ji'an | 0.872  | 0.821  | 0.801  | 0.911  | 0.777  | 0.634  |
| Jingyu | 0.949  | 0.926  | 0.914  | 0.949  | 0.893  | 0.765  |
| Shihu | 0.970  | 0.948  | 0.926  | 0.973  | 0.906  | 0.720  |
| Wangqing | 0.961  | 0.933  | 0.917  | 0.958  | 0.912  | 0.821  |
| Yanminghu | 0.930  | 0.915  | 0.890  | 0.929  | 0.891  | 0.824  |
| Yanchengshidizhenqin | 0.848  | 0.849  | 0.773  | 0.836  | 0.775  | 0.612  |
| Ganjiangyuan | 0.873  | 0.867  | 0.816  | 0.845  | 0.791  | 0.703  |
| Jiulingshan | 0.925  | 0.916  | 0.901  | 0.923  | 0.900  | 0.792  |
| Lushan | 0.806  | 0.790  | 0.762  | 0.820  | 0.763  | 0.683  |
| Qiyunshan | 0.911  | 0.899  | 0.879  | 0.898  | 0.869  | 0.795  |
| Tongboshan | 0.885  | 0.890  | 0.854  | 0.878  | 0.854  | 0.764  |
| Wuyuansenlinniaolei | 0.897  | 0.889  | 0.853  | 0.885  | 0.851  | 0.730  |
| Yangjifeng | 0.864  | 0.859  | 0.805  | 0.846  | 0.810  | 0.689  |
| Bailangshan | 0.891  | 0.906  | 0.833  | 0.936  | 0.911  | 0.914  |
| Daheishan | 0.967  | 0.946  | 0.965  | 0.929  | 0.951  | 0.879  |
| Hongluoshan | 0.942  | 0.926  | 0.778  | 0.925  | 0.821  | 0.802  |
| Louzishan | 0.872  | 0.871  | 0.827  | 0.938  | 0.911  | 0.891  |
| Nulu'erhushan | 0.954  | 0.882  | 0.881  | 0.936  | 0.929  | 0.887  |
| Qinglonghe | 0.869  | 0.915  | 0.806  | 0.854  | 0.910  | 0.818  |
| Yalujiangkoushidi | 0.833  | 0.793  | 0.739  | 0.800  | 0.736  | 0.653  |
| Zhanggutai | 0.915  | 0.876  | 0.852  | 0.931  | 0.841  | 0.706  |
| Alu | 0.940  | 0.941  | 0.942  | 0.942  | 0.947  | 0.940  |
| Bilahe | 0.900  | 0.901  | 0.908  | 0.895  | 0.906  | 0.899  |
| Gaogesitaihanwula | 0.971  | 0.964  | 0.957  | 0.968  | 0.964  | 0.957  |
| Hanshan | 0.870  | 0.865  | 0.865  | 0.860  | 0.860  | 0.861  |
| Hanma | 0.954  | 0.950  | 0.946  | 0.957  | 0.952  | 0.950  |
| Qingshan | 0.963  | 0.957  | 0.916  | 0.969  | 0.959  | 0.904  |
| Wulanba | 0.827  | 0.838  | 0.846  | 0.867  | 0.831  | 0.776  |
| Datongbeichuanheyuanqu | 0.773  | 0.739  | 0.677  | 0.765  | 0.666  | 0.535  |
| Huanghesanjiaozhou | 0.817  | 0.904  | 0.748  | 0.812  | 0.849  | 0.652  |
| Heichashan | 0.849  | 0.851  | 0.826  | 0.853  | 0.832  | 0.791  |
| Lingkongshan | 0.926  | 0.916  | 0.861  | 0.928  | 0.850  | 0.841  |
| Guanyinshan | 0.941  | 0.905  | 0.882  | 0.937  | 0.874  | 0.682  |
| Hanchenghuanglongshanhemaji | 0.901  | 0.886  | 0.874  | 0.903  | 0.868  | 0.841  |
| Huangbaiyuan | 0.939  | 0.923  | 0.906  | 0.937  | 0.891  | 0.789  |
| Huanglongshanhemaji | 0.985  | 0.968  | 0.956  | 0.983  | 0.956  | 0.957  |
| Lueyuangzhenxishuishengdongwu | 0.906  | 0.923  | 0.886  | 0.905  | 0.891  | 0.711  |
| Micangshan | 0.893  | 0.876  | 0.848  | 0.886  | 0.848  | 0.716  |
| Motianling | 0.914  | 0.894  | 0.847  | 0.906  | 0.871  | 0.719  |
| Pingheliang | 0.865  | 0.781  | 0.762  | 0.826  | 0.782  | 0.687  |
| Taibaishan | 0.863  | 0.808  | 0.790  | 0.850  | 0.796  | 0.681  |
| Taibaixushuihe | 0.912  | 0.870  | 0.854  | 0.906  | 0.865  | 0.747  |
| Wuliangshan | 0.809  | 0.785  | 0.764  | 0.792  | 0.737  | 0.682  |
| Zhouzhilaoxiancheng | 0.954  | 0.934  | 0.919  | 0.953  | 0.905  | 0.793  |
| Anzihe | 0.884  | 0.881  | 0.834  | 0.894  | 0.844  | 0.754  |
| Baihe | 0.819  | 0.805  | 0.786  | 0.837  | 0.776  | 0.734  |
| Caopo | 0.864  | 0.868  | 0.854  | 0.856  | 0.845  | 0.746  |
| Gexigou | 0.890  | 0.877  | 0.858  | 0.891  | 0.862  | 0.791  |
| Heizhugou | 0.743  | 0.786  | 0.737  | 0.805  | 0.766  | 0.733  |
| Jiudingshan | 0.852  | 0.839  | 0.772  | 0.876  | 0.797  | 0.632  |
| Laojunshan | 0.708  | 0.711  | 0.615  | 0.735  | 0.657  | 0.492  |
| Liziping | 0.808  | 0.788  | 0.777  | 0.787  | 0.742  | 0.632  |
| Nuoshuihezhenxishuishengdongwu | 0.937  | 0.913  | 0.890  | 0.936  | 0.882  | 0.744  |
| Qianfoshan | 0.860  | 0.846  | 0.815  | 0.854  | 0.822  | 0.710  |
| Xiaozhaizigou | 0.899  | 0.912  | 0.904  | 0.922  | 0.892  | 0.818  |
| Xuebaoding | 0.901  | 0.898  | 0.871  | 0.914  | 0.861  | 0.782  |
| Ailaoshan | 0.790  | 0.909  | 0.831  | 0.924  | 0.761  | 0.879  |
| Daweishan | 0.875  | 0.869  | 0.841  | 0.885  | 0.831  | 0.825  |
| Jiaozishan | 0.783  | 0.828  | 0.766  | 0.831  | 0.834  | 0.781  |
| Lvchunhuanglianshan | 0.888  | 0.899  | 0.874  | 0.908  | 0.858  | 0.832  |
| Nangunhe | 0.869  | 0.877  | 0.848  | 0.881  | 0.844  | 0.805  |
| Tongbiguan | 0.952  | 0.953  | 0.949  | 0.954  | 0.940  | 0.926  |
| Wenshan | 0.841  | 0.871  | 0.795  | 0.894  | 0.826  | 0.709  |
| Wumengshan | 0.795  | 0.782  | 0.761  | 0.804  | 0.753  | 0.636  |
| Yuanjiang | 0.903  | 0.957  | 0.887  | 0.955  | 0.901  | 0.814  |
| Yunlongtianchi | 0.828  | 0.830  | 0.782  | 0.847  | 0.783  | 0.682  |
| Wuyanling | 0.944  | 0.938  | 0.919  | 0.940  | 0.899  | 0.840  |
| Changxingyangzi'e | 0.858  | 0.872  | 0.835  | 0.875  | 0.850  | 0.740  |
| Dabashan | 0.841  | 0.819  | 0.794  | 0.842  | 0.793  | 0.656  |
| Jinfoshan | 0.793  | 0.786  | 0.734  | 0.795  | 0.734  | 0.598  |
| Wulipo | 0.797  | 0.785  | 0.748  | 0.809  | 0.758  | 0.633  |
| Xuebaoshan | 0.858  | 0.839  | 0.810  | 0.857  | 0.808  | 0.693  |