

in connection with the forest administration, advising the local head of the department, and compiling valuable reports and statistical information.

On the onerous duties of administration, legislation, and working of forestry in its most extended sense, which devolve on the higher grades, such as *Direktors*, *Ober-Forstmeisters*, *Oberland Forstmeisters*, and *Forst Räte*, I need say nothing more than that all those with whom I had the honor of coming into contact appeared thoroughly at home, not only with their particular duties and branch, but with all the details of State forest administration and management. In a word, the longer I remained the more I saw and felt how little I knew of the subject compared with those I met occupying similar or analogous positions in the forest service; and if the highest wisdom with regard to forestry is to know that you know nothing, I think I arrived very near it before my return to England.

I venture, however, to offer a few suggestions for the benefit of any of our forest officers who may be inclined to visit the German forests in future.

I think there are very few, unless they are Germans by birth, or have constantly kept up their German studies, who would find that they could with advantage attend a course of lectures at one of the academies without more than two months' previous residence and study of the language and forest technicalities. I am therefore inclined, with all deference to Dr. Brandis' suggestions, almost to leave that out of consideration in sketching in what way time can be best utilized.

To those who do wish to go through such a course, and I am certain they will never repent it if they have sufficient time and knowledge of the language, I should say, go to Hanover in September, and have at least one month in a revier before going to the academy. I do not think any revier could well be better suited for the purpose than Lauterberg. The winter term at Tharandt commences on the 15th October, and that at the Prussian academies (which I presume are also open to forest officers) and Aschaffenburg about the same time. Spend the winter at the academy, and by the end of April proceed for at least another six weeks to a revier, and apply what has been learnt, and then devote another six weeks or two months to travelling through other forest districts and comparing the management and system in each. This course would occupy at least ten months, and I do not imagine many forest officers on leave will be prepared to devote so much of their time to the subject.

For those who could only devote a short time comparatively to the duty, or do not feel themselves sufficiently proficient in the language to benefit by a course of lectures, I would prescribe residence on a forest revier during six weeks, visiting other reviers in the same kingdom or province a fortnight, and travelling through the forests of other countries one month, making three months in all; and, if this time could be prolonged, I should advise a longer residence in the one revier. Dr. Brandis strongly recommended me to confine my attention for the most part to one province or portion of a province, and I cannot say I actually learnt much in the shape of practical forestry after I left Hanover, always excepting the felling and transport of timber in the Black Forest, which require to be seen to be understood, and well repay a visit. I acquired much useful information in the other kingdoms, a great part of which, however, might be obtained from books.

It is difficult to say at what season of the year it would be best to commence the short course, but I am inclined to say not earlier than April, as the climate in North Germany is very raw and severe, and few forest operations can be carried on when the ground is covered with snow, although I did miss a forest survey in Hanover by not arriving even sooner than I did (the middle of March), which I much regretted. It is impossible in so short a time to see everything, and if you are at Hanover in the proper season you will be at Rippoldsau when comparatively little is going on, and *vice versa*.

Above all let no forest officer imagine he is starting on a mere pleasure trip, and will find everything comfortable and to his taste. He will find there is a great deal of roughing it in a shape which I think the most difficult to accommodate oneself to,—strange and unpalatable food, want of cleanliness and comfort, and a perfect change in the mode of life, habits, and associates, to what one has been accustomed to in England. I would particularly counsel the undertaking of no tours or expeditions until a little shaken down, at home with the language, and accustomed to the mode of life and style of food and lodging to be met with in a German village inn. I mention this as I spent much valuable time in making such tours at the outset, and derived little or no benefit.

Again, visitors must expect to be shown the same thing over and over again, which, although tiresome and seemingly useless, does good, I am convinced, in the end, in firmly impressing things on one's memory.

I append tabular statements showing the extent under forest in proportion to total area, population, &c., in the principal German States, the figures in which are taken from *Bernhardt's Forststatistik Deutschlands*, to which work, *Die Forst Verwaltung Bayerns*, and Director Burckhardt's publications, I am indebted for much valuable information.

SPECIMEN OF HEADINGS INTO WHICH THE SKETCH OR PREFACE OF WORKING PLAN MAY BE DIVIDED. (*Referred to at page 3.*)

PART FIRST.—Existing arrangements and circumstances of the forest.

1. Extent and situation. 2. Measurements, when, by whom taken, &c. 3. Boundaries. 4. Roads. 5. Local conditions, communal rights and privileges, and present state of the forest. 6. Yield and disposal of the produce.

PART SECOND.

(a.) General working plan proposed.

1. Description and class of timber to be grown and with what object in view. 2. *Umtrieb* or rotation of crop, which varies according to description of timber, and whether grown as *Hoch-Mittel*, or *Nieder Wald*. (See note on page 25). 3. Division and subdivision of the forest with reference to the *Umtrieb* and *Umtrieb Zeit*.

Suggestions to forest officers visiting Germany.

Long course, ten to twelve months.

Short course, three to six months.

Difficulties and discomfort to be expected at first.