Missouri’s forests make possible, or at least provide a backdrop for, almost all outdoor experiences. Missouri’s 15.4 million forested acres are a precious resource. Our forest resources, which cover more than one-third of our state, provide us with clean air and drinking water, lumber and heat, habitat for an incredible diversity of plants and animals, a myriad of recreational opportunities and—of course—scenic beauty.

In today’s fast-paced, high-tech world, we sometimes lose sight of the fact that it’s our trees and forests that often support our quality of life. It is even easier to forget that our actions or inactions with respect to trees on our private and public lands can have powerful effects on these important resources.

Forest Resource Assessment and Strategy
Put simply, Missouri’s Forest Resource Assessment and Strategy is an evaluation of conditions, trends, threats and opportunities facing our forests. It’s also a comprehensive strategy for sustaining these resources and the benefits and services we expect from them.

There are three important themes in Missouri’s Forest Resource Assessment and Strategy:

• Missouri’s trees and forests contribute greatly to our quality of life. Additionally, depending on how they are managed, trees and forests offer tremendous potential to help alleviate many of our state’s biggest social, ecological and economic challenges.

• Our forests are changing rapidly, and how we address these changes will largely determine their capabilities in the future.

• Missourians play a critical role in determining how Missouri’s forests will look and function into the future.

We hope to reacquaint Missourians with the trees and forests upon which we all depend, explore the forces that are changing them and highlight ways to ensure that future generations can enjoy the same forest benefits that we enjoy today. We encourage you and your family to rediscover the splendor of Missouri’s majestic woodlands. ▲
View of the misty Ozark mountains from Stegall Mountain on Peck Ranch.

Missouri’s forests keep us healthy and happy.

by GUS RAEKER
Forests are one of our greatest tools in the battle to reduce atmospheric carbon.

Missouri’s forests already store more than 5 million tons of carbon, and this number continues to climb. Each year, an acre of forest captures between 1 and 4 tons of additional carbon.

It may sound odd, but forests effectively reduce atmospheric carbon even when they are harvested, as long as the forested land is not converted to a non-forest use in the process. Harvested trees used for forest products, such as lumber or furniture, continue to store carbon. Even harvesting trees for biofuels favors the carbon equation because we can leave underground the coal or oil necessary to produce the equivalent amount of energy. And, in time, the forest will grow back to capture the same amount—or even more—carbon in the future.

Although some fossil fuels are burned when harvesting and transporting forest products, the amount is typically a small fraction of the resources needed to extract other materials, such as metal and coal. This offers yet another way in which using tree products can help combat greenhouse gasses.

Forest Products
Missouri’s forests are an important supplier of numerous wood products used not only in our state, but worldwide. Wood from Missouri’s forests is used to make...
furniture and cabinets, flooring, barrels, tool handles, charcoal, pallets, shavings, firewood and much more. Through the production of these and other wood products, Missouri’s forest products industry contributes approximately $5.7 billion to Missouri’s economy annually, supports 31,700 jobs, and generates $57 million each year in state sales tax.

Forest products have several environmental advantages over alternative resources:
- Trees and forests are renewable resources when managed properly. As trees are harvested, new trees quickly emerge and fill in the gaps left behind.
- Harvesting trees is generally much easier and less intrusive than the extraction of resources like metals, coal and oil.
- Wood products are generally biodegradable, recyclable or both.
- When done properly, the harvest of forest products can provide an economical means of improving forest health and wildlife habitat.

Community Trees and Forests
We have focused on the benefits of forests, but community trees also provide numerous benefits.

For example, trees reduce stormwater runoff in areas where there is a high concentration of buildings, streets and other impervious surfaces. This helps local governments and citizens save money by reducing the amount of stormwater that needs to be collected and treated.

People realize further benefits as community trees shade dwellings, reducing summer cooling costs. They also provide an oasis of shade when city temperatures become stifling hot. In the winter, trees help slow the wind, reducing winter heating bills.

Missouri’s Forest Opportunity Areas
Identifying areas where a little extra effort pays big forest dividends

After considering the vast benefits and services provided by Missouri’s forest resources and the considerable threats and opportunities we face for sustaining these benefits into the future, it quickly becomes apparent that we have our work cut out for us.

In order to direct our efforts and to identify those areas where we can achieve the most benefit for an investment of time and money, the Conservation Department, in consultation with numerous partners, developed a Forest Opportunity Model.

The model helps us evaluate forest opportunity areas in the state that meet the following two conditions: (1) areas that offer the greatest existing and potential forest benefits and services, such as biodiversity and soil and water conservation; and (2) areas where intervention would make the forest less vulnerable to poor harvest practices, urban development pressure, invasive insects and diseases.

Once we finished developing the model, we were able to delineate Forest Opportunity Areas and Priority Forest Landscapes. Forest Opportunity Areas are areas that offer Missouri’s best geographic opportunities for sustaining forest resources and the benefits and services derived from them. Priority Forest Landscapes are large landscapes of concentrated Forest Opportunity Areas.

In addition, we also established 10 Urban Forest Opportunity Areas. These include the 10 largest metropolitan areas, based on population, and represent areas which stand to gain the most from urban forestry strategies.

The Conservation Department continues to work on forest improvement throughout the state. However, identifying Forest Opportunity Areas, Priority Forest Landscapes and Urban Forest Opportunity Areas helps us focus on areas where a little more effort, in terms of collaborating conservation efforts with partners, actively seeking grants and pursuing other opportunities, will result in a lot more good.
Trees improve air quality and public health by reducing common urban air pollutants such as ozone, nitrogen dioxide and particulates. Trees also allow urban residents the opportunity to see and enjoy nature in the places where they live.

Wildlife Habitat and Biodiversity
In Missouri, we are fortunate to have very diverse landscapes. This great diversity is largely attributed to the fact that four unique ecological sections converge in Missouri. The glacially deposited Central Dissected Till Plains to the north, the Osage Plains to the west, the Ozark Highlands to the south, and the Mississippi Alluvial Basin in the Bootheel each have unique geology, soils, topography, weather and contain unique plant and animal communities.

The Missouri Natural Areas Program has classified some 85 distinct kinds of terrestrial natural communities (including 33 forest and woodland communities) and many other aquatic natural communities. These communities support more than 2,000 native plant species, more than 150 native breeding bird species, 108 native reptile and amphibian species, 67 native mammal species, 200 native fish species, 65 native mussel species, 32 native crayfish species and more than 130 native dragonfly and damselfly species.

Several of these species are found nowhere else but in Missouri!

Although these plants and animals reside in a wide variety of habitats and natural communities, many depend partially or wholly on healthy woodlands and forests. These include everything from ruffed grouse, which rarely leave the woods, to Ozark hellbenders, which live in Ozark streams but depend on forests and woodlands for clean, cool water.

Recreation and Tourism
Missouri citizens are fortunate to have more than 2.6 million acres of federal and state publicly owned forestland within our state. These forests provide places for kids (young and old) to explore, as well as countless recreational opportunities, including hiking and backpacking, canoeing and kayaking, hunting and fishing, collecting mushrooms and berries, wildlife viewing, camping, picnicking, scenic drives and much more.

The importance of these opportunities is well demonstrated in the 2003 Conservation Opinion Survey, which reveals that more than half of Missourians consider spending time outdoors to be their most enjoyable activity.

In addition, Missouri’s forests, both public and private, provide the backdrop for much of Missouri’s tourism industry. It is hard to imagine a Saturday trip to Missouri’s wine country, a weekend trip to the Current River for floating or a family vacation in Branson without the scenery afforded by Missouri’s forests.