The "Four MPH Brain"

by Bret Tkacs of *Puget Sound Safety*

It's a beautiful day as the bike effortlessly glides around the bend; suddenly, the rider discovers that the road is tightening up and, being experienced he responds with lightning fast reflexes—closing the throttle and pushing the bike deeper into the lean....

As he lies in the ditch listening to the approaching siren, he's still trying to figure out what went wrong. Sifting through all the fancy talk, concepts, and advice, the reality is that each of us are dealing with a brain that has only evolved to travel at four MPH—*not* at 30, 60, or 100 MPH.

We're all operating within the perimeters of a brain that, although it's been evolving over millions of years, still clings to many obsolete behaviors. Within those confines, it's fear that causes us to brake early, turn the bike too soon, dump the throttle in the middle of the corner, tense up, and keeps us from mastering visual acuity.

Understanding and knowing how to cope with fear is how one advances to the next skill level as a rider. Fear is the reaction our brain manifests in survival mode; the byproduct of which are reactions that are often the *opposite* of what we need to do when riding a motorcycle, interfering with riding ability, or worse, causing a crash.

Before one can master things like body positioning, perfect line selection, becoming a smooth rider, minimizing negative effects from rider input, etc., he must first be able to remain totally relaxed as a rider. Fear and poor visual acuity both prohibit the achievement of that goal.

During the track-based *Advanced Street Skills Course* (**PugetSoundSafety.com**), and the *Total Control Advanced Riding Clinic*, we take riders straight to the root of riding with

CONTENTS

a "Four MPH Brain." The theory is that evolution taught our brains that we travel at four MPH (essentially walking speed), and can only safely look 20 to 50 feet ahead with ample time to plan for changes in direction, or deal with upcoming hazards. This also applies to lean; when we lean more than approximately 15 degrees, our brain sets off a reactionary alert that we are likely to lose our footing and fall over, coupled with the "fight or flight syndrome" which increases blood flow, pumps out adrenaline, causes tensing up, and prepares for the fall. This is exactly what we don't want to happen while riding.

So, how does discussing brain evolution make one a better rider? As soon as we straddle an internal combustion engine, we've launched ourselves well beyond our brain's natural behavioral inclinations. This partially explains why a rider may have so much trouble regarding where he should be looking. As a motorcycle safety instructor, I'm often amazed by the number of students who don't understand how far ahead they *should* be looking. For example, only scanning one corner, or partially into a corner, when looking ahead. If the rider looks to where it feels natural… that's wrong—look farther. If it feels right it probably isn't.

Understanding concepts like fear and poor visual acuity, and how they affect our riding will help one to overcome these deficits. I'm hoping that if you know why you have a hard time looking where you should, this knowledge will help you to improve your riding, and to overcome those outmoded instincts that put us in harm's way. You may not know that you have visual acuity deficiencies if you haven't challenged yourself. And, the best way to retrain the "Four MPH Brain" is by taking an upper-level training course. ADV